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ART. I.—UNVERSITY CLINIQUE.—CASES AND OBSERVATIONS IN SURGERY.

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CASE 1.—*Scrotal Hernia.—A Fact in Legal Medicine.*

THE present case is one of scrotal hernia, the tumor, as you perceive, being of large bulk, and, as I learn, of fourteen years duration. The patient, whose name is Marsahll, is an Irishman, aged 74 years, of intemperate habits, and a shoemaker by occupation. The disease, it appears, came on without any assignable cause. The protrusion, which exists on the left side, has never occasioned him any pain, and he has, therefore, permitted it to pursue its own course, having never worn a truss or suspensory bandage. It is impossible to determine, from the history of the case, whether the parts originally passed through the internal ring, or whether the rupture was one by the direct descent, as it is called. The tumor, at present, is twelve inches in length, and nearly two feet in circumference, at its widest part, which is at the middle; its figure, as you perceive, being somewhat pyriform. It is firm, but somewhat elastic to the touch, and can be handled rather roughly without giving pain. The testicle is situated at its inferior extremity, and the head of the penis is nearly buried in its substance above. From the fact that the man has incontinence of urine, which constantly dribbles off, he is very uncomfortable, and not a

little offensive. He frequently experiences dragging sensations and colicky pains in the abdomen, and the bowels are habitually constipated. The contents of the tumor are, in a great measure, irreducible.

To render the case of Marshall instructive to you, it is necessary that I should offer some remarks upon the nature of the disease with which he is afflicted. We have just seen that the tumor, which is an unusually large one, is irreducible. The question, then, arises, how has it become irreducible? Upon this subject the patient is unable to afford us any intelligence, and hence we are necessarily left to our own conjectures respecting it. If we could cut down upon the parts, and examine them as they lie in their prison-chamber, we could very easily determine the question; but such a procedure would be unjustifiable, and is not for a moment to be entertained. Experience has shown that various circumstances may render a hernia, originally reducible, ultimately irreducible. Among these, one of the most common is the formation of adhesions between the protruded parts and the inner surface of the sac, produced by effused lymph. Sometimes bands of this substance are extended across the protruded parts, or from the protruded parts to the sides of the sac, thus tying them to each other, and rendering their replacement impracticable. Occasionally the irreducibility depends upon the abnormal enlargement of the parts, induced by their long residence in their unnatural and extra-abdominal situation. Both bowel and omentum may undergo this change, but it is well known to be much more frequent, as well as much more extensive, in the latter than in the former. Again, the cause may reside in the ring, or aperture of descent, which may be rendered disproportionably small; or the protruded viscera may contract adhesions to the edges of the opening, and in this manner they may be prevented from re-ascending into their original situation. Finally, the surgeon may be unable to effect a reduction on account of the long sojourn of the hernial contents on the outside of the peritoneal cavity, and the consequent diminution of the size of this cavity, thereby destroying its capacity for the reception and accommodation of the dislocated viscera. Whether the latter cause has any agency in preventing a reduction in Marshall's case, we cannot positively

assert; but it is reasonable to suppose that it has, especially when we take into consideration the size and age of the tumor.

We must inquire, in the next place, into the nature of the tumor. I have stated that the man has scrotal hernia, but I have not yet given you any reasons for my opinion, and, unless this be done, the chief interest of the case will be lost to you. From your knowledge of scrotal hernia, superficial as it may be, you are aware that this disease is liable to be confounded with other affections, particularly with hydrocele, variocele, and sarcocele. In a case like the present, where the symptoms are so well marked, mistake is hardly possible; but you must not expect always to have the disease spread out before you in so clear and tangible a form.

The disease with which such a tumor as this is most liable to be confounded is hydrocele. From this, however, it may always be distinguished by bearing in mind the following circumstances: Hernia always begins above, showing itself, in the first instance, as a tumor in the groin, from which it gradually descends into the scrotum. In hydrocele the reverse is the case, the swelling commencing below, and gradually extending upwards. In hernia the tumor is irregular in shape, generally more or less flattened in front and behind; whereas in hydrocele it is usually pyriform, being larger below than above. In hernia the testicle is at the bottom of the tumor; while in hydrocele it is at its posterior surface, commonly above the junction of the inferior with the two superior thirds, though this arrangement, as I remarked to you on a former occasion, is by no means constant; for in many cases of hydrocele the organ lies at the base of the swelling. In hernia the tumor is doughy, or gaseous, not elastic and fluctuating as in hydrocele; opake, and not translucent; in the former the patient usually experiences disagreeable dragging sensations and colicky pains, especially when the protrusion is very large; while in the latter he suffers no inconvenience save what results from the volume and weight of the swelling. In reducible hernia the contents of the tumor are easily replaced when the patient is recumbent, but re-descend the moment he resumes the erect posture; while in hydrocele no such changes can possibly occur, whatever may be the posture. When we add to these symptoms the fact

that the spermatic cord is always behind the protruded parts in hernia, and, consequently, much less distinct in its outline than in hydrocele, in which it can almost always be felt as a firm, rounded body at the upper extremity of the tumor, and the circumstance that the opening through which the rupture has taken place can always be satisfactorily traced with the finger, while in hydrocele the inguinal rings retain their natural form; we shall have no difficulty in arriving, in the majority of instances, at a correct decision. Much valuable information may also be derived from the history of the case, and from the use of the exploring needle, which, whenever there is any doubt about the matter, will not fail to afford the requisite light.

Scrotal hernia can always be readily distinguished from varicocele by the peculiar feel which the enlarged veins in this disease impart to the finger, which is similar to that of a bundle of earthworms, or of the intestines of a squirrel; by the bluish appearance of the tumor; and by the circumstance that the swelling, after being effaced, is always promptly reproduced when the patient is placed erect, and pressure is applied to the external abdominal ring. In reducible hernia, on the contrary, such a procedure necessarily prevents the re-formation of the tumor. In hernia, moreover, the swelling receives a distinct impulse under coughing and other muscular exertion; while in variocele the parts are perfectly passive.

In sarcocele the best guides are the history of the case, the uniform hardness of the swelling, the normal state of the abdominal rings, the inability of the surgeon to affect the volume of the tumor by his manipulations, and the indurated and distended condition of the scrotum. When the disease is associated with hydrocele, a part of the tumor will be likely to be translucent, soft, and fluctuating; thus strikingly contrasting with the remainder.

Solid tumors—fibrous, adipous, sebaceous, cystic, and encephaloid—developed in the scrotum, testicle, or vaginal tunic, are, in general, easily distinguished by their progress, by their form and consistence, by the nature of the local distress, and by the presence or absence of constitutional involvement.

The next question we are to consider in regard to this disease

is the *treatment.* This, in the case before us, resolves itself into very simple means. If the affection were recent, an attempt might be made to reduce the parts, or, rather, to render them reducible, but the time for this has passed by, and we must, therefore, content ourselves with palliatives. For this purpose the tumor should be constantly supported, both day and night, with a suspensory bandage, provided with shoulder-straps, otherwise it will answer the purpose but indifferently. By means of such an apparatus the patient will be relieved of much of his inconvenience, at the same time that the protrusion will be pretty effectually guarded against further increase. Great attention should also be paid to the bowels, which should be constantly maintained in a soluble condition. The diet should be plain and simple, easy of digestion, and comprised in the smallest possible bulk, lest the alimentary tube should suffer from flatulence and fœcal distention. All violent bodily exertion, fatiguing walks, and exercise on horseback must be carefully avoided. Such, gentlemen, in a few words, are the means to which we are restricted in the case of Marshall. I have said nothing about the treatment of his incontinence of urine. For the relief of this, I shall order for him, three times a day, thirty grains of bicarbonate of soda, dissolved in a third of a tumblerful of cistern water, and taken about two hours after each meal. The alkali may, perhaps, assist in allaying the morbid sensibility of the mucous membrane of the neck of the bladder, by correcting the acrimony of the urine, and thus rendering the organ more tolerant of its contents. Generally, however, but little benefit results from any mode of treatment that can be adopted, and the poor patient is obliged to bear with his infirmity the remainder of his days. Such an event is particularly to be looked for when the disease depends, as it often does, under such circumstances, upon paralysis of the bladder, and not upon mere irritability of the mucous membrane.

If Marshall's case were one of recent standing, an attempt might be made, and not without some prospect of success, to render the hernia reducible, by removing the adhesions which have led to the incarceration of its contents. The treatment necessary for fulfilling this indication would consist, first, in the observance of the most thorough and persistent recumbency; secondly, in

the use of the smallest possible quantity of food consistent with the preservation of life; thirdly, in the steady and careful suspension of the parts; fourthly, in the application of sorbefacients; and, finally, in the exhibition of mercurials with a view to the production and maintenance of slight ptyalism. When the patient is robust and plethoric, general bleeding and active purgation are premised; but in ordinary cases these remedies are uncalled for. Under this treatment, carefully persisted in for several months, the morbid adhesions are occasionally destroyed, and the parts rendered reducible. Little confidence, however, it must be confessed, is to be placed in it, and in the few instances in which I have tried it it has utterly failed.

In connection with the case of Marshall, I may mention another, of a similar nature, which has lately occurred in this city, and which has been a source of much interest in a medico-legal point of view. I allude to the case of an old gentleman of the name of Lyens, a resident of Market street. This man, who is about sixty-three years of age, and who is married and the father of a numerous family, was prosecuted, a short time ago, in our County Court, on account of rape and bastardy, alleged to have been committed upon an Irish female, a widow, formerly in his employ as a house-servant. At the time of the trial the child was two months old. A number of witnesses, professional and non-professional, were subpœnaed on both sides. For the proof of the bastardy, the testimony of the mother of the child was exclusively relied upon. She stated that some time in the month of March last the defendant had knocked her down, and that, while she was in a state of partial unconsciousness, he had ravished her person, conception being the consequence. Unfortunately, however, for the validity of her testimony, it was proved that she was delivered, precisely eight months after the occurrence, of a full grown child. Her testimony, moreover, was in many other particulars extremely loose and contradictory. On the part of the defendant, it was shown that he had been affected, for several years, with a large scrotal hernia, which had incapacitated him for sexual intercourse, by retracting the verile member, and preventing successful emissions. The tumor, according to my admeasurements, was twenty inches in circumference, and nine inches in length when the man

was recumbent, and nearly twelve inches when he was in the erect posture. Occupying the right side, it was irregularly pyriform, and exquisitely tender on pressure. The testicle was situated on the lateral aspect of the tumor, near its middle, and almost directly opposite the left. The entire penis, with the exception of the head, was concealed by the rupture, and dragged out of its natural position. The contents of the tumor were irreducible. The man was stout and well-built, with a decided inclination to corpulency.

Several intelligent medical gentlemen were called upon the stand, and their testimony tended to show that, while intercourse was possible, it was not, under the circumstances, at all probable. One or two even went so far as to declare that they considered it almost physically impracticable for a man, situated like the defendant, to effect penetration, their opinion being based upon the concealed and crooked condition of the verile member, the large volume and tender state of the tumor, and the prominence of the abdomen, which were regarded by them as so many circumstances calculated to interfere with the consummation of the act. Those who admitted the possibility of the act agreed with the other witnesses that it could have taken place only while the woman was in the most passive condition; or, in other words, that the slightest resistance, on her part, would have been sufficient to enable her to preserve her chastity, had she been so inclined. One of the medical witnesses testified that the size and age of the tumor were such as to weaken the seminal organs, to destroy sexual desire, and to render any successful emissions extremely difficult, if not impracticable. The presiding Judge, the Hon. Mr. Garland, charged the jury in consonance with the declaration of the medical men, and the fact that the child, although full-grown, had been born at the expiration of eight months from the time of the alleged intercourse, and they accordingly found the man "not guilty."

The effect of large scrotal herniæ in relation to impotence has not, I think, sufficiently claimed the attention of medical jurists. Most writers upon the subject give it a mere passing notice, without adducing any satisfactory information in illustration of it. Fodere, in his learned "*Traité de Médicine Légale et d'Hy-*

giène Publique," published in 1796, makes a distinct recognition of the circumstance, declaring that a scrotal rupture of large size might, by its continued pressure upon the spermatic vessels, prevent the secretion of the seminal fluid. In Italy, he states, double hernia, by pressing on the spermatic cords, sometimes causes as complete emasculation as when the testicles are removed with the knife. Many of the fine singers of that country are persons laboring under this disease, having been rendered so by the visitation of God.* Mitzger, a writer on medical jurisprudence, informs us that the Medical College of Western Prussia declared the existence of a large and irreducible hernia a sufficient cause of divorce. The late Professor Orfilla† observes that a scrotal rupture may be so voluminous as almost to efface the penis, and thus render coition impracticable. The same effect, he thinks, may be produced by a very large hydrocele. Our distinguished countryman, Dr. T. R. Beck, the able author of the "Elements of Medical Jurisprudence," the most erudite work on the subject in modern times, admits the possibility of such an occurrence with regard to scrotal hernia, principally, it would seem, upon the authority of Fodere; and extraordinary brevity of the penis, however induced, is generally considered by medico-legal writers and teachers as a disqualifying circumstance.

Three things are indispensably necessary in the male to successful copulation—"*erectio ac intromissio penis, cum emissione seminis.*" In the case of Lyens it is doubtful, from the volume of the tumor, the great brevity and crookedness of the verile member, and various other circumstances, whether he could command the one, or perform the other. As the hernia, however, is single, it is likely that he may have an occasional emission; but whether such a discharge could take place at a particular moment, under the influence of sexual excitement, is extremely problematical. In their attempt to arrive at a correct decision upon the subject, the jury were probably not altogether governed by the condition of the defendant, but, in some degree, by the character of the plaintiff, which was, to say the least, more than suspicious.

Finally, a large scrotal hernia might, juridically speaking, be-

* Op. cit T. 1. p. 373.

† Leçons de Medicine Legale, T. 1. p. 145. Paris, 1828.

come a source of interest in another point of view. A man thus affected might, in a rencountre with another, be struck or kicked upon the tumor, and thus sustain fatal injury, either from the shock of the blow, or from a rupture of the bowel, and consequent extravasion of fœcal matter. In the latter case, he might, it is true, escape with an artificial anus; but the greater probability, by far, would be that he would die from peritoneal inflammation. It would be a nice question, in such a case, for a medical jurist to determine whether the criminal should be punished with the same severity as when life is destroyed where no such complication exists. The sophist would have no difficulty in finding a satisfactory solution.

Case 2.—*Encephaloid of the Mammary Gland.*

The patient, Miss H., is a resident of Barren county, Kentucky, and is thirty years of age. She came to me, a few days ago, as a private patient, with a letter of introduction from my friends, Drs. Jourdon & Trabue, of Glasgow, under whose treatment she had been a short time previously. She is the daughter of a poor farmer, has always been industrious in her habits, and, until attacked with her present disease, was never sick. Upon inquiry, she informs me that one of her grand-mothers was reported to have had cancer of the breast, but that she was cured of it, and lived thirty years afterwards, when she died of another complaint. It would seem that this female, about ten years ago, received an injury upon her right breast, producing slight inflammation, which, however, soon disappeared, but left a small movable nodule about two inches to the left of the nipple. The little tumor gradually but slowly increased, and was occasionally the seat of sharp, lancinating pains. About the middle of June, 1853, it had attained the size of a large walnut. It now began to grow very rapidly, and became the seat of a burning pain, more severe at one time than at another. The skin retained its natural color until the middle of last August, when it began to assume a purplish aspect at the part where the morbid growth was first observed. About two

weeks before her arrival in town, a physician, supposing there might be pus in the tumor, punctured it at two points. Nothing escaped from the lower opening, but the upper discharged a large quantity of fluid which, at first, seemed to be pure blood, but which soon changed to a whitish, flaky, and offensive matter. Within a short time after the swelling was punctured, a fungus commenced protruding at each orifice, and is now, owing to the destruction of the intervening integuments, of enormous size, of a dark purple color, and the seat of frequent and copious hemorrhages. The pain, since the formation of the fungus, has become much mitigated. At present, the tumor measures twenty-two inches in circumference, and twelve inches across its surface. The subcutaneous veins are exceedingly enlarged, much more so than I have witnessed in any other case, and they are seen ramifying over the tumor like blackish lines, the blood in several of them being seemingly completely stagnant. Altogether the appearance of these vessels is most singular and striking. The tumor, which is somewhat hemispherical in shape, is elastic on pressure, evidently lobulated, and pretty firmly adherent to the pectoral muscle. What is remarkable, it is the seat of very little pain. The discharge from the enormous ulcer is very profuse, thin, sanious, and excessively fœtid. There is no enlargement of the glands of the axilla, of the subclavicular region, or of any other part of the chest.

The general health, as you observe, is much deranged; the countenance is pale and sallow, the muscles are flabby and attenuated, the pulse is habitually feeble and above a hundred in the minute, the bowels are constipated, and her strength is rapidly declining. For the last fortnight she has had occasional paroxysms of fever, attended with chilly sensations, but no sweats. Her sleep is much interrupted, and she is obliged to use anodynes at night. Her appetite is feeble. It may be stated that there is occasionally a keen, darting pain in the other breast.

Such, gentlemen, is a faithful outline of the case before us, one, in every respect, of the most melancholy character, from the fate which inevitably awaits it. Surgery, in such a disease, and especially at such a stage of it, is vain and impotent, utterly without hope and without resources. Our hands are literally tied; the

time for an operation, if an operation is ever justifiable in such a disease, is passed; and all that we can do, under the circumstances, resolves itself into mere attempts at palliation. The great and leading indications are, first, to support the woman's strength; secondly, to allay the excessive fœtor of the discharges; and, thirdly, to prevent further hemorrhage, the continuance of which must speedily destroy her. Already the very foundations of life have been sapped by the frequent and abundant losses which she has thus sustained.

To meet the first indication, I shall order her to take, every five hours, or four times daily, at equal intervals, two grains of quinine and the same quantity of sulphate of iron, in solution, along with twenty drops of elixir of vitriol. The exhibition of these articles will, if anything can, under the circumstances, improve the tone of the digestive organs, increase the strength, and impart a certain degree of plasticity to the blood, which, as is apparent from the countenance, is in a highly impoverished condition. The diet should be plain but as nutritious as possible, and should consist, mainly, of animal broths, with the addition of soft-boiled rice, barley, or hominy, the lighter kinds of meats, and stale bread, crackers, or soda biscuit, with weak tea or milk at breakfast and supper. Coffee, hot bread and biscuit, pastry, and the coarser varieties of meats and vegetables should be carefully avoided. Porter, good ale, wine-whey, or milk-punch, should be taken several times a day, in quantities suited to the state of the stomach and heart. There is no probability that any of these articles will injuriously excite the circulation, and I shall, therefore, recommend them to be used quite freely. To induce sleep, and allay pain, anodynes should be given, but not oftener or in larger quantity than is absolutely necessary to attain these objects.

The discharges being excessively fœtid, it is necessary to pay some attention to this circumstance, both on account of the patient, and for the sake of those who are obliged to be around her. You may easily suppose what would be the effect upon a system, already so enervated as this poor patient's, if she were compelled to breathe an atmosphere so greatly contaminated by the effluvia of her own person. Its tendency would inevitably be to produce still further depression of the vital powers by impairing her appetite

and preventing the due æration of the blood. We shall, therefore, direct, not merely some, but special attention to be paid to this subject. The remedy by which we may hope to allay this horribly offensive and sickening odor is the liquid chlorinate of soda, a drachm of which may be mixed with about four ounces of water, which may then be sprinkled, from time to time, upon the dressings, and also upon the body and bedclothes, or a piece of lint, wet with it, may be kept constantly upon the ulcerated surface. The liquid chlorinate of lime may also be used, but I usually prefer the soda. It need hardly be stated that the dressings should be frequently changed, and the parts cleansed with tepid water.

The third indication is not so easily fulfilled; for the fungus will be likely to bleed, more or less, in spite of all that can be done to prevent it. The internal remedies, if faithfully employed, may do something towards this, by increasing the plastic powers of the blood; but I do not think that we need look for much aid from this quarter. My chief reliance will be upon rest and suspension of the affected organ, and upon the application of creosote, alum, and acetate of lead, at the commencement of a threatened attack of hemorrhage. As a preventive, care should be taken to avoid all compression of the tumor by bandages and other means. When the blood spirts out, as it occasionally does, in a full stream, from an enlarged vein or artery, direct compression with the finger will prove the most efficient remedy, and I shall not fail to give the patient some instruction upon this point.

Whether the above measures will be instrumental in promoting the comfort of our patient, and in prolonging her existence, cannot be positively predicted. Everything indicates that she cannot, under any circumstances, survive beyond a few weeks; but it is our duty to do something, and the above course is the best that suggests itself to my mind.

Case 3.—*Scirrhous of the Mammary Gland.*

Mrs. Vie, aged thirty-two years, a native of Germany, but for the last eight years a resident of this country, and the mother of six children, the youngest being sixteen months old, noticed, about four years ago, immediately on the inner side of the left nipple, a small tumor which has been steadily but tardily increasing ever since, and is now about the volume of a very large orange. It is lobulated on the surface, or, more correctly speaking, it looks as if it were composed of several small masses, free at the top, but fused together at their base, remarkably hard, and but slightly movable. The skin is somewhat rough, of a tawny, reddish color, and pervaded by numerous little vessels, in a state of considerable turgescence. At one point, over a space about half an inch in diameter, it is superficially ulcerated. It was for several years entirely free from uneasiness; but within the last few months, it has been the seat of occasional pain, of a darting, pricking, and burning character, and particularly severe in damp states of the atmosphere. The axillary ganglions are slightly enlarged and exceedingly hard, though quite movable, and a similar nodule exists along the inferior edge of the great pectoral muscle and also just below the clavicle. The nipple retains its normal shape and size, but is somewhat more firm than naturally. Such is a brief but accurate account of the condition of the breast and of the surrounding parts. The general health, you will notice, is but little impaired. Latterly, however, the woman has lost some flesh, and her strength is not as good as formerly, though she is still able to attend to her house-work. She menstruates regularly; her appetite is natural, and she sleeps well enough at night. The bowels are habitually costive, and the spirits are somewhat depressed. So far as I can learn, there is no hereditary predisposition to carcinomatous disease. The eyes and complexion are light, and the stature rather diminutive.

There are several points of interest in this case demanding brief notice. In the first place, our attention is arrested by the patient's age. She is now thirty-two years old, and the malady, as we are informed by the record, was first noticed four years ago. It is

quite unusual to witness scirrhus of the breast at this early period. In the great majority of cases it does not show itself before the age of forty, forty-five, or fifty; that is, about the decline, or soon after the disappearance, of the menses. Indeed, there are some writers who deny that genuine scirrhus is ever seen in this gland under the age of thirty-five, or forty; but this is a mistake, as my own experience testifies. Instances of this disease occasionally occur, though very rarely, in females between the ages of eighteen and twenty-five; and there are several cases on record where it was witnessed before the period of puberty.

Secondly, we may mention, as singular features, the small volume of the tumor, its excessive hardness, and the peculiar tubercular appearance of its surface. Scirrhous formations never acquire any great bulk; but in this instance the growth is uncommonly small, especially when we consider its age. The consistence is also unusual. I do not recollect ever to have felt so hard a mammary gland from any cause. The tumor projects off from the surface of the chest, and its surface has a singularly tuberculated appearance. What adds to this appearance is the want of adipous matter which isolates the indurated and enlarged gland from the circumjacent parts, and thus renders it inordinately prominent.

In the third place, there is a peculiarity in the nipple in this case. In most instances of scirrhous of the mammary gland, this little body is greatly retracted, especially in the advanced stages of the complaint, as well as singularly altered in its form and appearance. In the present case, on the contrary, it retains its normal characters, with the exception, perhaps, of its being a little harder than in the natural state.

Fourthly, it is not common to witness such extraordinary hardness in the lymphatic ganglions of the axilla, on the pectoral muscle, and in the subclavicular region. The sensation which these bodies impart to the finger leads to the conviction that they are deeply involved in the morbid action; or, to express myself more properly, that they are in the same scirrhous condition as the mammary gland itself.

Fifthly, although the disease is of four years standing, there is, as yet, comparatively little derangement of the general health. All the functions, even the menstrual, appear to be well perform-

ed. The malady, however, is gradually progressing, and will, doubtless, ere long, make serious inroads upon the general system.

Having thus explained to you the chief points of interest in this case, let me say a few words respecting its diagnosis. I have repeatedly stated to you, in the course of the preceding remarks, that the disease is scirrhous, or hard cancer, and you will necessarily expect that I should assign some reason for my opinion. Any elaborate comments upon the subject, however, would, after what has been already said, be superfluous. The symptoms are so plainly marked, so distinct and characteristic, that he who runs may read. The slow but steady progress of the tumor, its excessive hardness, which is greater than that of any other substance, except cartilage and bone, its small volume, its circumscribed form, its tuberculated surface, the sharp, pricking pain, and the enlarged and indurated condition of the neighboring lymphatic ganglions, are so many circumstances which stamp the nature of the disease, and enable us, even upon the most superficial examination, to determine the diagnosis with unerring certainty. In short, there is no other tumor, deposit, or formation, of which I have any knowledge, or which occurs in the mammary gland, which at all resembles the one before us.

A month ago, I showed you a case of encephaloid tumor of the mammary gland, and, if you will recall to mind the circumstances attending it, you will be struck with the remarkable contrast between that case and this. In the former, the tumor was of enormous volume, most of which it had attained in a very few months; it was comparatively soft and elastic; there was excessive enlargement of the subcutaneous veins; the centre of the morbid mass was ulcerated, and was the seat of a foul, sanious discharge, together with frequent hemorrhages; the pain was so great as to compel the poor woman to use anodynes to enable her to sleep; the neighboring lymphatic ganglions however, even those of the axilla, were free from disease; the body was greatly emaciated; and the countenance exhibited a peculiar sallow and cachectic appearance, indicative of a contaminated state of the system, and of approaching dissolution. No two cases could possibly be more dissimilar, or exhibit, in a more striking manner, their distinctive peculiarities.

A few words in regard to the treatment of this case, and we shall dismiss it. The patient has applied to me for relief. She has borne up nobly under her burden, but it is becoming more and more painful, and she is, therefore, anxious to have something done. It must be obvious to you from the account of the case, and from the general remarks which I made to you upon carcinomatous affections in the early part of the session, that the case is not a proper one for the knife. Such is the condition of the tumor and of the neighboring parts that the removal of the diseased gland would only tend to hasten the poor woman's death. Nay, it admits of doubt, great doubt, whether a scirrhous formation of the mammary gland should ever be treated in this manner, even under the most favorable circumstances, as it respects the surrounding structures and the general health. My opinion has always been—and this is the doctrine which I have endeavored to instil into the minds of my pupils ever since I began to teach the principles and practice of surgery—that the less we meddle with these cases the better it is for our patients; the less likely, in short, will they be to have their sufferings aggravated and their lives prematurely destroyed. For a number of years past I have declined operative interference nearly altogether, even in the earliest stages of the disease, and in the report which I had the honor recently to prepare for the American Medical Association, "On the Results of Surgical Operations in Malignant Diseases," I have endeavored to place this subject in its true light before the profession. The facts developed in that document are of a most startling character, and cannot fail, I think, to satisfy the most sceptical in regard to the propriety of the rules there laid down for our government in the treatment of malignant affections. I trust that the reading of that paper, if you should so far honor it, and my oral teaching in this institution, will have a tendency, on the one hand, to inspire you with a love for conservative surgery, and, on the other, to repress any itching that you may have for the indiscriminate use of the knife.

But to return from this degression. Since the knife is inadmissible in this case, we must content ourselves with palliatives; that is, means calculated, as in the case of Miss H., to improve

the general health, and to allay pain. With this view we shall order the patient to take occasionally a few blue pills, to regulate the bowels and secretions; to live upon light and simple food; and to use, three times a day, at equal intervals, two grains of citrate of iron and sulphate of quinine, with a little morphia, laudanum, or Dover's powder at night. As to arsenic and cicuta, two articles which have acquired some celebrity in the treatment of carcinomatous diseases, I have, after repeated trials, found them utterly worthless, and now never employ them. The dress should be worn very loose, so as not to compress the tumor, which should be kept constantly covered with a layer of glazed cotton; a substance that will afford sufficient warmth, and at the same time maintain the cutaneous perspiration.

Art. II.—CASES AND OBSERVATIONS IN SURGERY AT THE PARIS HOSPITALS.

BY E. WILLIAMS, M. D., IN A LETTER TO PROFESSOR GROSS.

Case 1.—*Burn of the Eyes by Lime.*

On the 27th of August, I saw a man at the eye clinic of M. Désmarres, who, two days previously, had fallen with his face in a vessel of slaked lime. He stated that he immediately felt an intense burning pain in both eyes and ceased entirely to see. M. Désmarres removed from the palpebral sinuses a considerable quantity of lime mixed with coagulated blood. The corneæ, seemingly only superficially cauterized, were still partially transparent, so that the pupil and iris were visible through them—the right being more seriously involved than the left. The surround-

ing conjunctiva and schlerotica were of a dirty, yellowish white color, and completely insensible to the contact of the finger or an instrument. The patient was free from fever; there was no photophobia,—in short, he did not suffer the slightest pain, but could not see to walk. This condition of freedom from suffering and inflammatory action lasted for *two weeks*. On the 14th day, the right eye, which was most deeply burned, was still unchanged; but the left was red and painful, with considerable chemosis, and there was a semilunar ulceration of the cornea near its border, occupying about one-fourth of its circumference. By means, however, of the most energetic antiphlogistic measures, with repeated scarifications of the vessels of the globe around the cornea, this eye was saved, and the patient now sees sufficiently to transact business. But with the right organ the result was very different. On the 15th or 16th day, intense inflammation was developed. The surface of the cornea and the whole extent of the conjunctiva, deprived of vitality by the lime, was sloughed; and, in a very few days, firm adhesions occurred between the lids and the globe of the eye, in spite of every effort which was made to prevent it. From day to day the cicatricial tissue, which took the place of the conjunctiva, continued to contract from behind forwards, till it had produced the most complete symblepharon. The cornea, transformed into a cicatrix, contracted from the circumference towards the centre, and presented itself as a small, hard, fungous excrescence, which protruded between the edges of the lids at the central part. I saw this patient yesterday, and found him in the same condition, excepting that the opacity of the left cornea is gradually disappearing, and he sees better with it than he did some weeks ago.

At the first sight of this unfortunate patient, M. DÉSMARRES made a very unfavorable prognosis—stating that the right eye would be irretrievably lost, but the other might possibly be saved —that although no violent symptoms were then present, the *absence* of *sensibility* in the right cornea and conjunctiva was sufficient evidence that they would be, sooner or later, eliminated in the form of an eschar and followed by symblepharon. His experience had proved to him that the commencement of the eliminating process in burns of the eye, does not occur before the fifteenth or

twentieth day after the accident, and that it was hazardous to base a favorable prognosis, at an *early period*, upon the apparently *slight character* of the burn. In indicating the great reserve which should characterize the conduct of the surgeon in this respect, he related the history of a young woman whom he treated some three years ago, for a similar accident produced by sulphuric acid, that her jealous husband, in a fit of passion, had dashed in her face. Both corneæ, when he first saw her, were still almost perfectly transparent, but their surfaces, with that of the surrounding conjunctivæ, were completely *deprived of tactile sensibility*. The woman had no pain or fever, and continued to see moderately well. *Twelve days* passed before severe inflammation was developed. Extensive sloughing of the cornea and schlerotica then occurred in the left eye, the crystalline lens escaped, and, in less than one month from that time, the ocular and palpebral surfaces of the conjunctiva were solidly agglutinated together. Subsequent but unsuccessful attempts were made to separate them and insert an artificial eye, and the patient remains with an incurable deformity. Fortunately the left eye, less profoundly cauterized by the acid, was saved, after running the most imminent danger. There is now in the Hospital of the Faculty a young man who, seven years ago, received some quick lime in the eye. It was immediately washed out with a stream of cold water, and a constant application of the same fluid, kept up for several days, prevented him from suffering a great deal; but at the end of three weeks, there was symblepharon, with union also of the free edges of the lids with each other. He came into the hospital some weeks ago, requesting an operation to remedy the deformity. From the prominence of the organ it was evident that there was a staphyloma behind the agglutinated lids. On the 7th of December, M. Nelaton separated, with a bistoury, the edges of the lids, dissected them loose from the balls, and then excised a portion of the staphyloma, hoping to prevent a re-union, and enable the patient to wear an artificial eye. High inflammation followed the operation, and the adhesion was again re-produced, excepting the free edges of the lids, which still remain separated. He now proposes to detach them again and immediately insert an artificial eye, and retain it constantly there so as, if possible, to prevent the

reunion. But the use of this means, or of any other foreign body inserted between the lids and ball, often creates excessive inflammation; or, even if it is tolerated by the patient, the union gradually occurring at the bottom of the conjunctival cul de sac, pushes the foreign body forward with the irresistable force of cicatricial contraction, and expels it from the cavity, and agglutination is inevitable. Again, should the surgeon succeed in maintaining this substance between the cicatrizing surface for many months, and then remove it, the cavity will then be almost surely obliterated. Mr. N. remarked that in a case of a similar kind, he once operated, and made the patient wear a thin plate of metal for six months, then removed it, and, in a short time, the adherence was reproduced. Every one who knows the incontrollable force with which a cicatrix contracts, can readily conceive the almost entire uselessness of all means usually adopted to prevent adhesions when the whole extent of the conjunctival surfaces has been involved. When, however, the bottom of the cul de sac has remained intact—when the union is limited to the anterior part—then the chance of success by the use of the metallic plate or enamel eye interposed, is much greater. I remember having seen M. VELPEAN operate upon a case of symblepharon last summer, in which he passed a needle with a strong thread through the middle of each lid, and attached them, the one over the forehead, and the other beneath the chin, so as to separate them from all contact with the globe. This was kept up for several weeks, but finally the surfaces were fatally soldered together as before. You remember, doubtless, the little boy from Indiana, with the same deformity produced by the explosion of gun powder, upon whom you operated in my presence in the spring of 1852, and in whom the difficulty was again reproduced.

Two other procedures have been suggested and practiced in this almost irremediable deformity. The one dissects up the adhesions, inverts the lids, and maintains them thus with the cuticle in contact with the globe, till cicatrization is completed. The other divides the lids perpendicularly at their middle points, detaches the flaps from the globe beyond the ordinary limits of the conjunctiva, everts them completely, and keeps them thus during the cicatrizing process. This latter method is the only one which can

be resorted to with much prospect of success, when the entire extent of the conjunctiva is adherent. After the cicatrization, the divided edges of each lid can be pared and readily united with needles and sutures.

In consequence perhaps of the rarity of burns of the eye, but little is said of them in treatises upon surgery, and hence the above observations may not be without interest to the general practitioner. During the past six months, I have followed assiduously the eye clinic of Désmarres, where are present, every other day, from fifty to one hundred and fifty patients, and the first case related is the only one of burn of the eye that I have seen. I have observed enough of this accident, however, to induce me in the future to use great reserve in the prognosis of such cases, however slight.

Case 2.—*Strangulated Femoral Hernia--Operation—Death by Cholera.*

On the 6th of December, a woman came into the hospital, stating that she was suffering from strangulated hernia. The rupture had existed for ten years, and she had worn a truss which did not keep it perfectly reduced. It caused no suffering or special inconvenience, however, till the 4th of December, when she was taken, without any appreciable cause, with vomiting, and soon after observed that the tumor in the groin was larger than usual, and somewhat painful to the touch. A physician was called, who, by long continued taxis, succeeded only in very slightly diminishing the size of the swelling without reducing it. On the following morning the vomiting still continued, and there had been no discharge from the bowels. Renewed efforts at taxis were made, but with no better success than the first. On Tuesday, at 12 o'clock, she entered the hospital, and, at 7 P. M., I examined her in company with the chief Intern of the hospital. The vomiting had then entirely ceased—her countenance tranquil, skin natural, pulse slow and soft—in short, she did not seem to be suffering at all. There had been, however, no discharge from the bowels since

the previous Saturday. In the left groin was a tumor of the size of a small hen's egg, ovoidal in shape with the long diameter in the direction of Poupart's ligament, and which she said had not changed in size for three days. It seemed to mount up in front of the ligament, but, when carefully examined, a pedicle was felt extending from it beneath the ligament, and restraining thus the freedom of its movements. To the feel it was very hard, giving exactly the sensation of a hypertrophied lymphatic gland; it was entirely dull upon percussion, and but very slightly painful to the touch. It seemed impossible that a patient free from all suffering or fever, and with a countenance perfectly calm, should be laboring under strangulated hernia—an affection which transforms every feature into an index of intense suffering and anxiety. A purgative injection was ordered, which brought away some fœcal matter.

Wednesday morning, 8 o'clock, same tranquil state continues—pulse natural—no vomiting. Prof. NELATON prescribed a dose of castor oil, which was very soon vomited. In the afternoon, restlessness, vomiting and hiccups appeared, and some unsuccessful attempts at reduction were made.

Thursday morning, 8 o'clock, same symptoms continued and she felt some uneasiness in the region of the tumor, but firm pressure did not cause much pain. The previous existence of a hernia, the pedicle extending from the tumor into the abdomen, and the obstinate constipation, with vomiting, left little room for doubt about the nature of the difficulty. The injection had caused the discharge of some fœcal matter from the bowels; but it, doubtless, did not come from above the constriction. Nothing given by the mouth had traversed the whole canal. The taxis proving unsuccessful, Prof. N. resolved upon an operation. On cutting through the skin and superficial fascia, he came upon a fatty mass much resembling epiploon, but he incised it freely and at length perceived the bluish, semi-transparent sac. When it was opened a small jet of bloody serum issued, and the little knuckle of intestine, purple from the strangulation, presented itself. After incising freely the sac, he seized, with the fingers, the sides of the canal through which the intestine had protruded, and, making rather strong traction, notched in three places, with a

probe-pointed bistoury, the superior constricted part. The intestine was then reduced without any difficulty, the vomiting ceased, and soon afterwards she had several free evacuations from the bowels. The wound was not closed by sutures, but simply dressed with charpie and a bandage. For the following forty-eight hours the case progressed very favorably, when all at once she wrs attacked with cholera. Cyanosis soon appeared, the voice was extinct, pulse gone, skin cold and shriveled, without the least tympanitis, pain upon pressure or other symptom of peritonitis. She died on the 13th, four days after the operation. At the post mortem, no trace of peritonitis were discovered; the knuckle of intestine that had been imprisoned was still purplish but not gangrenous. At the abdominal opening of the crural canal and extending slightly into the cavity of the abdomen, were three slight incisions involving only the peritoneum and cillular tissue beneath it.

There are several points worthy of special remark in the history of this case.

First—The complete subsidence of the restlessness and vomiting after they had existed for 24 hours, and that too without the reduction of the hernia—the length of time (nearly 48 hours) that this state of calmness and freedom from pain and vomiting lasted—and finally the reappearance of the grave symptoms and the consequent necessity of an operation.

Second—The remarkable hardness of the tumor, and its resemblance to an enlarged lymphatic gland—the complete dulness upon percussion although it contained a portion of intestine filled with gas, and its almost entire freedom from pain whether spontaneous or from pressure.

Third—The seat of the strangulation, that is the peritoneum simply at the superior orifice of the femeral canal. There was not t.e slightest constriction either at gimbernats ligament, the falciform process of the fascialata (Hay's ligament) or the opening where the hernia traversed the fascia cribriformis, the three points that are always accused as being the seat of the strangulation. In regard to this woman, Prof. Nélaton remarked that he had seen a similar case not long since, where the tumor was entirely free from pain. There were vomiting, obstinate constipation, cramp, great depression, and that peculiar anxious and contracted state of the

features so characteristic of strangulation. The tumor was irreductible, yet all these symptoms, except of course the *constipation*, subsided, and for some 36 hours the patient was perfectly tranquil as in the case above cited. They at length returned with extreme violence, and he was compelled to operate and found a portion of intestine severely strangulated. The posibility of the disappearance of the urgent symptoms for a length of time, notwithstanding the persistence of the strangulation, and the entire freedom from pain in the region of the tumor, is a fact which should be faithfully borne in mind. PROF. NÉLATON'S method of operating for strangulated hernia is exceedingly simple. He cuts without hesitation through all the tissues till he sees the bluish sac, rendered so by the sanguinolent serum and purplish color of the intestine which are seen through it; he then divides the sac carefully, and taking hold of it on each side makes sufficient traction to bring into view the strictured part, (which he says exists in the great majority of cases at some one of the little perforations in the cribriform fascia through which the hernia has protruded) and then notches it at several points so as to enable him to reduce the contents. There is certainly no danger in cutting freely through the skin and other tissues, whether fascia or adipose substance, till the purplish transparent sac is brought into view. The bluish color of the sac renders it unmistakable if its contents are *intestinal*, and if they are omentum, no great inconvenience arises if they are cut. Many young surgeons I am confident, allow patients to die without an operation, or else, defer it so long that there is no hope of success, from timidity originating out of the *classic idea* of the great difficulty and danger of the operation. As a general rule at least, it is certainly one of the simplest in all surgery.

The accumulation of fat in the subperitoneal cellular tissue present in this case, and giving rise to the *hardness* of the tumor and its complete dulness upon percussion, is often a great source of embarassment to the inexperienced operator. But with the idea present in his mind that this deposit, often quite thick, of adipose substance frequently exists and must necessarily be cut through before the sac is reached, he proceeds coolly but of course *prudently* in his operation. It is by thus thickening the walls of the tumor by the *deposit of fat* that nature sometimes obliterates the

sac and effects a spontaneous cure. Or, the neck merely of the sac being obliterated after the reduction of the contents, there remains a small isolated serous cavity which may subsequently become the seat of a serous accumulation in the form of a cyst. I saw, a few days ago, in the wards of Prof. Velpeau, a case of this kind. The woman had a hernia which had disapeared spontaneously, but, some months afterwards, a tumor began to be developed in the same point which increased slowly till it had acquired the volume of a hen's egg. He made a free incision into it, gave issue to the fluid it contained and filled the cavity with charpie so that it healed by granulation from the bottom. Cysts supposed to be developed in the lymphatic glands of the groin, have doubtless sometimes their origin in this source.

While on the subject of hernia, I must tell you of a couple of novel operations recently performed by M. Maisonneuve, who stands at the head of *progressive surgery* in Paris, and *progress* you know in *surgery* and *politics* is rarely effected without the *loss of blood.* The one was a patient upon whom he had operated for strangulated hernia, and in whom the symptoms of strangulation still continued. The other, a case in which the hernia had been reduced by the taxis but all the urgent symptoms still persisted. In both he opened the abdomen in the right lumbar region, searched a portion of the small intestine *above* the seat of the stricture which he determined by its distension; then found the caecum, made an incision into each and united them by sutures so as to establish a route for the alimentary matters. Both patients were almost in *articulo mortis* when this proceedure was adopted, and of course *died.* Such an operation in such desperate circumstances, if not *advisable*, is at least *excusable*, particularly in Paris. I should like to give you a summary of the many operations of an *analagous nature*, that I have seen performed by this *origiual and enthusiastic* surgeon, but my space will not allow it. He has a perfect mania for hazardous and unheard of operations. Aside from this, there are many traits in his character that I admire very much, and many of his novel proceedures are exceedingly ingenious; besides, he operates most beautifully.

Case 3.—*Ascites taken for a Cyst of the Ovary—Injection of Iodine—Death.*

Early in November, there entered the hospital a woman aged 31 years with an enormous distension of the abdomen. She stated that fifteen months previously, shortly after a natural accouchment, she perceived that her abdomen was enlarging, and, supposing herself pregnant, consulted her physician who told her it was a tumor. The enlargement increased very rapidly, and on the 12th October last, she was tapped in consequence of the extreme difficulty of breathing, and over *six gallons* of a clear citron colored liquid withdrawn. The swelling, however, commenced immediately, and in less than three weeks the abdomen was as large as before the puncture. On the 14th November, M. Nélaton examined the patient and pronounced the tumor to be a *cyst of the ovary.* In his clinic he stated that the ancients possessed no physical means of diagnosing *ascites* from a cyst of the ovary when it had acquired a *great size and filled the entire abdominal cavity;* but that now the *sign* of Rostan renders it comparatively easy. In ascites the patient lies upon the back and the intestines distended with gas, float upon the liquid, and hence there is dulness upon percussion in the right and left lumbar regions with sonoriety in the umbilical. On the contrary, a cyst of the ovary mounts up in front of the intestines, pushes them to each side and gives rise to dulness in the *umlilical and sonoriety* in the *lumbar regions*, which was the case in the patient under consideration. There was one source of error, however, which, though extremely rare, might give rise to wrong diagnosis. If the intestines were perfectly free from gas they would not float upon the liquid; or again, the existence of *ancient adhesions* might bind them down and prevent them from rising to the surface. The rapidity with which the fluid accumulated, rendering tapping necessary every two or three weeks, demanded summary treatment, otherwise, the patient would die from exhaustion in a very few months. In this view of the subject, and encouraged by the reports of a number of cases of ovarian cysts cured by injections of the tincture of iodine, he resolved upon this treatment, but not without serious misgivings as to the conse-

quences of injecting an irritating fluid into such a vast cavity. But the woman was still young, of a moderately good constitution, and the liquid previously withdrawn, was limpid, indicating a favorable surface for adhesive inflammation; besides, according to him, there was no evidence of serious organic lesion in any of the viscera. But, contrary to Prof. N's well known character for minute and careful examinations, he omitted the *heart* entirely. On the day previous to the operation, I examined, with the chief intern M. Dolbeau, the chest of the woman and found the heart's actions very irregular and tumultuous, extensive dulness upon percussion in the precordial region, and a strong bellows murmur with the first sound. Besides this, there was slight edema of the inferior extremities.

On the 18th November, he punctured the abdomen, drew off an enormous quantity of clear serum and then injected about a quart of the following solution: Tinct. of iodine, one part; dist. water, two parts; iod. of potash, q. s.; to prevent the precipitation of the iodine. The injection remained about five minutes, and then was allowed to issue by the canula. It escaped, however, with difficulty and at least half was necessarily left in the abdomen. The woman immediately became faint, the lips pale, pulse feeble and frequent with much general anxiety; but she did not complain of the abdomen. During the following forty-eight hours she vomited frequently, had great thirst, cold skin, and a very rapid feeble pulse. Still there was no acute abdominal tenderness or other symptoms of intense peritonitis. After two days the pulse became fuller, the vomiting ceased, the lips redder, and expression of countenance much better.

Nov. 22—patient appears much better—no abdominal tenderness—no vomiting; but the fluid is very rapidly re-accumulating and there is now perhaps near two gallons in the abdomen. Desiring something to eat, a little soup with a small piece of chicken was allowed her. She seemed quite well till two o'clock the following morning, when she suddenly called for the nurse, complained of a severe pain in the head and died in a very few seconds.

Post mortem. On opening the abdomen, an old and very *consistent false membrane* was found binding the small intestines firmly against the vertebral column. The collection of liquid was in the

peritoneal cavity in *front* of the intestines, and hence the dulness in the umbilical and sonoriety in the lumbar regions. The ovaries were a little enlarged, and in one of them were several small cysts of the size of an ordinary pea.

Upon the surface of the peritoneum were some shreds of recent false membrane, the result of the slight peritonitis produced by the injection. The liver was cirrhosed. The pericardium was obliterated by adhesions, and there was enormous hypertrophy of the heart, with great narrowing and thickening of the mitral valve; a large clot existed in the right ventricle and the left auricle was greatly dilated, sufficiently in fact, to contain an adult fist.

The death in this case, nearly five days after the operation, and when all the symptoms of peritonitis had subsided, can not, I think, be attributed to the injection. The grave organic lesion of the heart, is sufficient explanation of the sudden termination of life in the midst of apparent improvement. But the error of diagnosis led to a treatment which *might have been* immediately fatal, and which this eminent surgeon would by no means have employed, if he had suspected an ascites produced by an organic disease of the heart. He was led into the mistake by his great confidence in the physical sign of Rostan, as afforded by percussion, although aware of the possibility of certain physical conditions that may give rise to the same phenomena even in ascites.

Several cases have recently been published in the French journals, of cysts of the ovary cured by repeated injections of iodine, but it is by no means certain that many of them were not ascites produced by chronic peritonitis, or other affections much more amenable to this treatment than ovarian dropsy. Still, as there are several well authenticated cases of cure upon record, it must be acknowledged to be a valuable resource in this almost irremediable affection. In 1840, PROF. DIEULAFOY, of Toulouse, struck with the good results and comparative innocuity of injections of iodine into chronic abscesses, hydrocele, external cysts of various kinds, and even into the joints as practised by VELPEAU, conceived and executed the idea of throwing the same substance into the peritoneum in cases of chronic peritonitis followed by intractable dropsy. His first patient, reduced by repeated tappings to the very brink of the grave, was completely cured after three injec-

tions at intervals of from two to four weeks; most probably by the complete obliteration of the peritoneal cavity by adhesive inflammation. This remarkable cure brought the treatment into vogue, and it has since been greatly popularized by VELPEAU and other distinguished surgeons. One thing is certain, that the contact of this substance with the peritoneum, thickened and altered as it is in chronic peritonitis and other affections does not often produce grave accidents. But inject the same substance into a healthy peritoneum and death is almost certain. A few months since I saw MR. MAISONNEUVE tap an ovarian cyst, and afterwards inject a large quantity of solution of the tincture of iodine, most of which could not be made to run out again. The woman was instantly seized with excruciating pains in the abdomen, sinking of the pulse, coldness of the surface and extremities, excessive anxiety of the countenance, and in *less than three hours she was dead.* On examination it was found that the canula had become deranged, and allowed the injection to enter the *peritoneal cavity.*

The array of experiments upon *dogs* in opposition to injections of iodine for ascites is of little weight; because, aside from the *difference of species*, there is a very wide difference also, between the healthy peritoneum of a dog and this membrane as it is thickened and altered by disease in the human subject. They are about as irrelavent to the question, as are the experiments of MALGAIGNE upon *rabbits* in order to determine the influence of the extended, or semiflexed position of the limb in the treatment of fractures! Between the size and direction of the muscles with respect to the bones, the shape of the joints, arrangement of the ligaments, &c., in the rabbit, and in the "lord of creation" there is as great a difference as there is between the *moral attribute* of these two animals. These questions can only be solved by trials upon the human subject, and thus far experience sanctions injection of iodine, under certain circumstances, into the peritoneal cavity, ovarian cysts, the pleura and even the joints. During the past summer I saw it thrown into the pleura by Valleix, with very decided benefit in a case of hydrothorax from chronic pleurisy, and several times have I seen VELPEAU inject the cavity of the knee joint with the same good results. He says he has injected the knee joint in thirty cases, and the phenomena which follow are precisely similar to

those that are observed after the injection of a hydrocele,—slight pain, redness and swelling which subside entirely in three or four days. He alledges that this fluid injected into the joints, is not dangerous—that it cures a certain number of cases, especially when uncomplicated—that it assists other remedies in curing others—and that he has never seen it followed either by suppuration or anchylosis. Of course he only resorts to it in case of failure from ordinary and more simple treatment. The same procedure has also lately been proposed as a means of *dissolving* foreign bodies which form in the articulations. This substance, however, when thrown in considerable quantities into large cavities is liable to be absorbed and produce severe poisonous effects, especially, when it does not issue freely through the canula, which is often the case. On the 20th of June, I was present and saw PROF. NÉLATON inject a very large chronic abscess at the anterior part of the thigh, caused by caries of the spine. He threw up a pint and a half of fluid, at 10½ o'clock, and only about half of it could be got out. Three hours afterwards, the boy began to feel giddiness and dimness of vision, followed soon by vomiting and extreme "malaise." The skin was moist, extremities cold, pulse small and thread-like, respiration accelerated, great prostration of strength. This formidable array of symptoms lasted all night, and on the following morning, in addition, there were *cough*, *sore throat*, *extinction of the voice*, inarticulate moanings, and enormous swelling, with lividity of the upper eye lids. On the 22d, he seemed stronger, but still complained greatly of a pain in his throat which was dry but not otherwise altered from health. But the respiration, especially *inspiration*, was very laborious with hoarseness and a croupy cough. He was evidently in danger of suffocation from oedema of the glottis, and PROF. N. was on the point of resorting to tracheotomy, when under the influence of purgation, ice internally, sinapisms to extremities and blisters on each side of the larynx, he was relieved and in a few days all the symptoms disappeared.

I have several other cases upon my note book, of which I intended to have spoken, and especially of the operation of *urethotomy*, as recently proposed by M. RÉBARD in a very remarkable monograph upon strictures of the urethra. By means of an instrument of his own invention, he makes a very deep incision through the

stricture from within outwards, so as to be able at once to insert the largest sized bougie of Bénéqué's scale. I have seen the operation performed several times with a modification of his instrument, a sort of lithotome caché,—but must defer giving you the results of my observations till some future occasion, as my letter is already much too long.

Review.

Art. III—ELEMENTS OF HUMAN ANATOMY: GENERAL, DESCRIPTIVE AND PRACTICAL.

By T. G. Richardson, M. D., *Demonstrator of Anatomy in the Medical Department of the University of Louisville, and one of the attending Surgeons at the Louisville Marine Hospital*; 8vo pp. xx. 734. Philadelphia: Lippincott, Grambo, & Co.

"What a piece of work is a man! How noble in reason! how infinite in faculty! in form and moving how express and admirable! in action how like an angel! in apprehension how like a God! the beauty of the world! the paragon of animals."

We deem it but an act of justice to the author of the present work that a more extended notice of it should be given than the one which appeared in the January number of this Journal. Owing to the late period at which the work was received a mere bibliographical notice was all that could, under the circumstances, be attempted. We resume our task so much the more willingly for

two reasons; first, because the production is one strictly Western in its origin, and secondly, because it is the offspring of a young man born and reared in our midst, and educated exclusively in a Western University, without the *prestige* of Eastern study or foreign travel. In making these remarks, it is not intended in the most remote degree to draw any distinction between Western and Eastern Authors, or to institute any comparison between Western and Eastern Medicine, theoretically or practically considered. Whatever is good, valuable, or reliable, is worthy of our confidence and regard from whatever source it may emanate. The West belongs equally to the United States as the East, the North and the South; they are all parts, God be thanked, of one integral whole, and hence whatever they may contribute, whether in literature, the arts, or the sciences, should be considered as offsprings, not of a sectional, but of a national character. Whenever medical men become politicians, and exert their talents and their influence for sectional purposes and not for the general weal, they disgrace their profession, and prove recreant to its best and dearest interests. Many a good work has been condemned both in this country and in Europe, simply because it did not happen to have had the good fortune to be *born*, although it might have been *ushered* into existence, in a particular city. "Can there any good thing come out of Nazareth." The hand of Christian, Jew and Gentile is at once raised against it. Our motto, like that of our great and immortal Statesman, should be, "The union first, the union last, the union one and indivisible."

Many who read this article will doubtless be disposed to ask, what necessity is there for another work on human anatomy? Are our libraries not already full, even to repletion, with treatises of this description? Are we not in possession of the elaborate systems of Portal, Bichat, Boyer, Meckel, Cloquet, Hildenbrandt, Cruveilhier and Quain, to say nothing of the less pretending volumes of Blandin, Monro, Harrison, Maygrier, Lauth, Wilson, Ellis, Ledwich, and of our own countrymen, Wistar, Horner, and Morton? In a word, what need is there of another text-book, since our pupils have already a much greater number of such works than they can profitably read? We do not deny the right of any one to institute such inquiries; for in this enlightened age

and in this republican country people do very much as they please, and it is, therefore, very natural, as well, indeed, as very proper, that they should think and judge for themselves upon all matters pertaining to, or affecting, their interests. But we would respectfully ask, by way of offset against such inquiries, whether the above list, which hardly embraces a tithe of the works on the subject, does not refer, in great measure, to foreign works; works which, on account of the language in which they are written, are either inaccessible to the American student, or which, if attainable, are so in consequence of translations and reprints? Our own country, strange as it may seem, has furnished but few treatises on this branch of medical science, and with these the present performance will, to say the least, bear a most favorable comparison. We have labored long enough, God knows, under the yoke of Great Britain; the want of an international copy-right law, and the indiscriminate re-publication of foreign works, in all the departments of medicine, have well nigh destroyed our national individuality. While the English language, from its universal diffusion in this country has been an inestimable blessing to the people, by furnishing them from abroad the amplest supply of intellectual nutriment, at a rate so cheap as to bring it within the reach of all, even the most poor and humble, it must be perfectly evident, to every reflecting mind, that the circumstance that all our works are written in this language has been, and will continue to be for a long time to come, a great impediment to the establishment of a national medical literature. In this respect it is a great misfortune that we have no language of our own, even though it were no better than the Chickasaw, Choctaw, or Hottentot; forein works then could reach us only in the form of translations, and many an English book which now rejoices in a reprint in the hands of an avaricious bibliopolist would fall still-born from the press. The fact no longer admits of doubt that many of the current English works of the present day are much more widely circulated in this country than in Great Britain. Take for example, Mr. Ferguson's Practical Surgery, which has passed through at least one edition more in the United States than in England, and which has probably four readers in this country for one at home. The same is true of many other publications. With such books

American works cannot possibly compete. There being no international copyright law, the foreign works can be furnished at nearly half the cost of the native; and, when we add to this circumstance the venal puffs with which these reprints are usually ushered before the American profession, it is not difficult to perceive which work, all other things being equal, will gain the victory.

A second reason why we have no national medical literature, is the fact that many of the English reprints are ushered before our profession under the sanction of the names of American physicians. Formerly there was some excuse for this. In the infancy of our country there were few physicians on this side of the Atlantic competent to compose works; their opportunities for observation were comparatively limited, and few had time or inclination, amid the care and annoyances attendant upon the formation of our medical and charitable institutions, to devote themselves to authorship. But the times have changed. These obstacles have been removed, and the world can no longer accuse us either of ignorance or idleness. Indifferent we may be, but not if we are imbued with a true spirit of patriotism and a genuine love and regard for our profession. It used to be, and probably still is, an easy matter for Eastern publishers to hire men to become sponsors for foreign works, and to lend them, for the paltry sum of fifty or a hundred dollars, their names and their influence. Thus endorsed, they often acquire, like spurious coin, an extensive circulation, far greater, in fact, than they obtained at home, or than their intrinsic merits justified.

Another evil which greatly operates to our disadvantage, and the extent of which can be fully apreciated only by those who are thoroughly acquainted with its nature, is the venal character of a portion of our medical press. Every publisher in the country knows that he has only to send a copy of his reprint to the editors of our medical journals, to obtain from these *guardians* of the profession a flaming puff, or a fulsome notice of the English, Scotch, or Irish emigrant. For the sake of increasing their libraries, at a cost *apparently* so cheap, few of these gentlemen hesitate to sacrifice their personal independence and the true interests of our domestic medical literature. The effect of such a course is to give

undue weight and importance to foreign works, and to induce the belief, both in and out of the profession, that we are incompetent to supply our own wants by our own resources. That there are noble exceptions to this statement is unquestionable, but they are mere exceptions, not the rule. They are like angels visits, few and far between. We do not deny to foreign works the right to be heard; they should be heard, and be heard deliberately in the spirit of true and candid criticism; their claims to public confidence should be freely canvassed and honestly presented; all that we protest against is the indiscriminate and wholesale system of puffing, so characteristic of the medical press of this country. Editors guilty of the conduct here alluded to, deserve to be branded as the Arnolds of our profession; for they would not scruple to betray our best interests, and barter away our birth-right for a few shekels of silver.

Fourth, and lastly, for we have not time to dwell upon this topic, the establishment of a national medical literature and the success of American authors, is greatly impeded by the fact, that many, if not most, of our medical schools recommend to their pupils foreign works as text-books. That this is the case the annual announcements of our institutions abundantly attest. To refer merely to what exists at home, we find that in the University of Louisville the following foreign works are embraced in the list of those recommended as text-books to the different courses of lectures: Wilson's and Quain's Anatomy, Carpenter's and Kirke's Physiology, Liston's Surgery, Chaillie's Midwifery, Ashwell on the Diseases of Females Pereira's Materia Medica, Watson's and Stokes' Practice. Of the works of Horner, Morton, Dunglison, Oliver, Eberle, Beck, Gibson, and many other excellent American authors, no mention is made in connection with the subject. But this practice is not peculiar to Louisville; it obtains, to a greater or less extent, in every school of this country. The circumstances which induce this state of things could, if time permitted, be very easily traced to their real causes, the disclosure of which would not, it is believed, reflect the greatest credit upon our medical schools.

We have incidentally glanced at a few of the principal causes which, in our judgment, are vitally concerned in retarding and

obstructing the development of our national medical literature and the success of our native medical writers. It cannot be denied that a good book will always find readers and patrons, but it is equally certain that its merits are often overlooked in this great sea of foreign reprints. Not the least misfortune arising out of this state of things is, that men, in every respect competent to write, are afraid to become authors, well knowing that a copyright work will stand a poor chance by the side of one on the same subject unencumbered in this manner. At some future time we intend to revert to this subject, and discuss it at some length. For the present, we will only add that it is one of grave importance, demanding the serious consideration of every well disposed American physician.

We have stated that our country has produced but few works on anatomy. The first treatise of the kind ever published in the United States, was the "System of Anatomy" by DR. CASPAR WISTAR, in 1814. Considering the opportunities and the high position of the author, the work was one of a very meagre character, altogether in arrear of the existing state of the science in Europe, which had furnished, years previously, the great and immortal treatises of PORTAL, SABATIER, BICHAT, BOYER, MAYER, SOMMERING, and other writers. It was, in fact, for the most part, nothing but a gross compilation from the monographs of JUNES, MONRO, BELL, and other English anatomists. The first volume, as the author himself acknowledged in his preface, consisted almost *verbatim et literatim* of this kind of material, requiring hardly the use even of the scissors, much less of the pen. The second volume, treating of the viscera, bore at least the impress of originality, but the descriptions, although in the main sufficiently accurate, were exceedingly imperfect, and, compared with those of the writers above named, eminently tame and *formulated*. When his work appeared, DR. WISTAR had been for many years a Professor in the University of Pennsylvania, an institution which could then already boast of an existence of nearly half a century. When we reflect upon these facts—the numerous valuable works that had been published in Europe, and the position of DR. WISTAR as the most distinguished anatomical teacher of his age in this country, we cannot concede to him any of the qualities which should

characterize an author. His work evinces neither judgment, industry, erudition, nor even good taste. In the latter, especially, he showed himself to be perfectly wanting. Had he possessed good taste and even a moderate amount of industry he would never have borrowed, as he did, one half of his "system" from British writers, and thus afforded occasion for the scoffs and sneers of foreign reviewers. Dr. Wistar enjoyed a most enviable reputation as a teacher on anatomy, and it cannot be doubted that, had he possessed a proper share of industry, he might have produced a great national work. His language is always well chosen, his style concise yet clear, and his descriptions generally accurate. But we have no desire to be capricious and ill-natured; Dr. Wistar was an excellent anatomist, if not a great author, and, with all the imperfections of his work, we should be grateful to him for having produced it. It was the first effort to *naturalize* anatomical science in the United States; and, regarding it in this point of view, it behooves us to make due allowance for its many sins of omission and commission. With the many valuable additions that have been made to it, since the death of the lamented author in 1818, by Dr. Horner and Dr. Pancoast, who have been successively its editors, the "System of Anatomy" by Caspar Wistar is destined to retain, for many years to come, a place in the affection and regard of every American student.

The next work on anatomy was from the pen of Dr. Horner, for several years the assistant of Dr. Wistar and Dr. Physick and for nearly a quarter of a century the Professor of Anatomy in the University of Pennsylvania. Appearing in 1826, in two octavo volumes, under the title of "Special and General Anatomy," it had passed through the eighth edition two years before the author's death in the winter of 1853. As it now presents itself, it may be justly regarded as a most able and systematic treatise, thoroughly representing the existing state of the science, creditable alike to our age and country, and reflecting the highest credit upon the school with which Dr. Horner was so long and so usefully associated. In its general scope and character, it is a vast improvement upon its predecessor, and, notwithstanding the inelegancies of its style, will compare favorably with the very best foreign works on the same subject. Indeed, with the exception of the great treatise

of CRUVIELHIER, the elaborate system of HILDENBRANDT, and the excellent production of QUAIN and SHARPE, there is not, so far as our knowledge extends, a more valuable and excellent work on anatomy in any language. DR. HORNER was a most zealous and laborious man, with a mind thoroughly imbued with a love of the science which he so ardently and so successfully cultivated for upwards of a third of a century. Indeed, taken all in all, he was one of the most able and accomplished anatomists of the age, and the only great anatomist that our country has yet produced. We do not speak of him here, of course, as a lecturer; in this respect he had many superiors; we refer altogether to his thorough knowledge of the subject, in all its relations, general, descriptive and surgical, to say nothing of the microscopical and pathological departments, in which his information was eminently respectable, if not profound,—to his extraordinary skill as a dissector, and to his zeal and untiring devotion to the cause of anatomical pursuits. Comparative anatomy we believe, never specially engaged his attention, and this is the only branch of the subject which he has not illustrated by his labors. With talents of no high order and many early educational deficiencies, he accomplished results of which any man, however ambitious, might justly be proud. If he has not produced the ablest work on human anatomy that has ever been written, he has furnished one which reflects great credit upon our country, and which will serve to transmit his name honorably to posterity along with those of WINSLOW, BOYER, MECKEL, CRUVIELHIER, HILDENBRANDT, and other cultivators of the science.

In 1849 appeared the work of Dr. SAMUEL GEORGE MORTON, whose ethnological writings, especially his elaborate treatises on the "Crania Americana," and "Crania Ægyptiaca," have earned for him a world-wide reputation, and conferred upon him an enviable immortality. The title of the work "An Illustrated System of Human Anatomy, special, general and microscopic," and its motto, "*Oculis subjecta fidelibus*," sufficiently express its nature and object. The book, in its mechanical execution, is one of the most beautiful that has ever been published; the engravings, amounting to nearly four hundred, are executed in the highest style of the art known in this country, and the paper and typography are altogether of a superior quality, nearly equal, in fact,

to those of the best English works on medicine. But here the merits of the performance cease. As a literary and scientific production it has nothing in particular to recommend it. In both these respects, indeed, it is inferior to many of the treatises previously in use, and accessible to American pupils. It is difficult to conceive what motive could have actuated the distinguished author in spending his time upon a work which, in no event, could enhance his reputation, or fill a void in the anatomical literature of the country. Following the beaten track, he has introduced no new arrangements in his topics, nor added one solitary fact to our pre-existing knowledge in any of the departments of anatomical science of which he treats. With the dissecting-room, it may be presumed, he has not much familiarity, and with the microscope not much experience. When men have acquired great proficiency and great reputation in one particular branch of science, it behoves them to pause and reflect before they undertake the composition of elementary works. When Dr. Morton set about this task he had reached the zenith of his renown as an ethnologist, and a period of his life, which should both have admonished him to refrain from an enterprise which any youthful aspirant after fame, with a moderate share of anatomical knowledge, might have executed quite as well as he. Nevertheless, as we have already said in regard to Wistar's work, we should not undervalue the "Illustrated System" of Dr. Morton, since, whatever may be its deficiencies, it is calculated rather to add to, than detract, from the dignity and importance of our national literature, a subject in which, as has been already stated, every true-hearted American must feel the deepest interest.

Such was the state of our anatomical literature at the close of the first half of the present century. It will be conceded, even if we include in the enumeration Dr. Goodman's Anatomical Investigations, Dr. Horner's United States Dissector, and Dr. Smith's Anatomical Atlas, that our stock was comparatively, a meagre one. This circumstance is not a little surprising when we take into consideration the great number of medical schools in this country, and the extraordinary advantages afforded in many sections of the United States for the prosecution of practical anatomy. During the same period, France, Germany, and England have each fur-

nished numerous and important works on the subject, eminently creditable to their authors and to the scientific character of the nations to which they respectively belong. The commencement of the present year has supplied us, almost simultaneously, with two new works on this department of medicine. Of these, one is from the pen of Dr. W. R. HANDY, Professor of Anatomy and Physiology in the Baltimore College of Dental Surgery, and the other from the pen of Dr. T. G. RICHARDSON, Demonstrator of Anatomy in the University of Louisville. These two works, added to those of WISTAR, HORNER and MORTON, give the sum total of five native treatises on the subject; a result astonishingly small when we consider the number of works that have been published in some of the other branches of medical science.

The work of Dr. HANDY, of which the mere mention must suffice, is entitled, "A Text Book of Anatomy and Guide in Dissection," and was professedly written for the use of students of medicine and dental surgery. Upwards of one hundred pages are devoted to the description of the mouth, gums, and teeth, and this circumstance, in the opinion of the author, if not also of the reader, constitutes the great and distinguishing feature of the work, which, in point of mechanical execution is altogether inferior to its cotemporary.

It is not our design to present an elaborate account of the work of Dr. RICHARDSON; all that we shall attempt to do is to delineate its general scope and character. It is in fact, itself an analysis, and to analyze an analysis would be an absurdity.

The work is divided into three parts, the first being devoted to general anatomy, the second to the bones and joints, and the third to the dissection and study of the soft parts. The subject of general anatomy occupies about eighty pages, in which, limited as the space is, is discussed every thing that is really important to be known by the medical student. Until recently the study of the animal tissues was, unfortunately, too much neglected, both in the schools of the United States and of Great Britain, and there is reason to believe that it receives, even at the present day, too little attention. One cause, perhaps, of this is the want of a good text book. For a long time, in this country as well as in England, the only work to which the student could refer for information on this

branch of anatomy, was the great treatise of Xavier Bichat, translated by Dr. George Hayward, of Boston, and published in that city in 1822, in three octavo volumes. "Before the time of Bichet," as Dr. Richardson justly observes, "no successful effort had been made towards a correct analysis of the body into certain distinct 'textures,' or 'tissues,' which are recognized by the unaided senses, and distributed throughout the different parts and organs. This illustrious Frenchman indicated, and followed as far as his means of study and his too short life permitted, this new direction of scientific anatomy." The work of Bichat was the first attempt at a systematic arrangement of the tissues, according to their affinities and intimate relations, and the important part which they play in the construction of the different organs and systems of organs of the animal frame. Prior to his time all was darkness and confusion. Bordeu, towards the latter part of the last century had, it is true, written a treatise upon what he improperly called the mucous tissue; but, although his account was in the main sufficiently correct, many errors necessarily crept into the work, and the principal good which resulted from the publication was, that it served as a guide board to Bichat, in pointing out to him the path which he was destined afterwards to tread and pursue with so much credit to himself and advantage to science and humanity. The work which he published at the dawn of the present century, as the result of his labors, was one of vast toil and profound originality, and will, in whatever light it may be viewed, remain as an enduring monument of his genius, his research, and his indomitable industry. It comprises the germs of thousands of discoveries that have since been achieved in the various departments of medicine, especially in physiology and pathology, and is, beyond all doubt, by far the most precious contribution to our science that has ever been made by any individual. The discovery of the circulation of the blood by Harvey was, in comparison with the revelations of Bichat in general anatomy, a mere sun-beam as compared with the sun itself. Bichat was emphatically the Bacon of medicine. In him, more than in any other physician before or since his time, were happily concentrated vast genius, profound philosophy, and vast industry, with a spirit of generalization, of which, until then, the medical world knew no parallel. It seems

as if Providence had designed him for a special mission, to enlighten and benefit his profession, and that, having accomplished the objects of that mission, he should be prematurely summoned from his earthly toils to join, in a brighter and a better world, the master spirits that had preceded him thither. At the early age of thirty-two nothing remained of this great man, save his image, to his friends, his pupils, and his admirers; and his great and imperishable works to his profession and to posterity. Bichat is the father of general anatomy.

In 1828 appeared the excellent "Manual of General Anatomy," of Bayle and Hollard, in an English translation by Dr. Gross, then of Philadelphia. Soon after this Dr. Togno, also of Philadelphia, published a translation of Beclard's "Elements of General Anatomy." These two works exercised an important influence in directing the taste of our pupils in regard to the study of the tissues, and they continued to be, for a long time, the text-books of our principal schools. Dr. Craigie's well-known work on "General and Pathological Anatomy" was issued at Edinburgh in 1828, and the following year appeared, at London, Mr. Grainger's "Elements of General Anatomy," at that time, and for a considerable period afterwards, the only original treatises on these subjects in the English language!

The following extracts will serve to convey an idea of the author's classification of the tissues:—

"Bichat and his immediate followers, however, admitted as distinct tissues only the solid parts of the body, which in reference to their distribution he arranged into classes, or 'systems,' such as the 'muscular system,' &c. But modern anatomists have most clearly demonstrated that many of the fluids may justly claim a similar designation.

"The number of the solid tissues has been variously estimated from seven to twenty. The following table, however, in which only fifteen are enumerated, will be found to answer all ordinary purposes. The old, and most easily remembered classification, into 'general' and 'partial' tissues, *i. e.* tissues that are found in every part of the body, and those that exist only in certain localities, is here adopted:—

General Tissues.
1. Areolar or cellular tissue.
2. Vascular tissue, comprising blood-vessels, lymphatics, and lacteals.
3. Nervous tissue.

Partial Tissues.
4. Epithelial tissue.
5. Pigmentary tissue.
6. Adipose tissue.
7. Muscular tissue.
8. Fibrous tissue.
9. Yellow-elastic tissue.
10. Cartilaginous tissue, including fibro-cartilage.
11. Osseous tissue.
12. Cutaneous tissue.
13. Mucous membrane.
14. Serous membrane.
15. Glandular tissue."

Having given an account of the physical, chemical, and vital properties of the tissues, together with their development and growth from cells, the author proceeds to speak of the individual tissues, commencing with the areolar, cellular, or filamentous. Each of these subjects receives due attention, and is illustrated by beautiful figures, calculated to convey to the mind of the student a just idea of the nature of the object to which they relate.

Part second treats of the bones and joints, and occupies nearly one hundred and fifty pages. It has evidently been composed with much care, and comprises a very full account of these important objects.

Part third, after a brief introduction, in which the student is instructed in regard to the proper method of conducting his investigations in the dead-room, begins with the dissection and description of the abdomen, including an excellent account of the surgical anatomy of inguinal hernia. Under the head of the pelvis and its contents, will be found a very full and lucid description of the perinæum, one of the most important surgical regions of the body; and the anatomy of femoral hernia is very fully considered along with the structures of the inferior extremity. The organs of the senses, the thoracic, abdominal, and pelvic viscera, the blood-vessels, especially the arteries, and the nerves, are all described with much care and at great length. Finally, the work is accompanied by a table of contents and a most elaborate index, so desirable in all treatises of this kind. The woodcuts, nearly two hundred and seventy in number, are executed in the best style of the art, and add greatly to the intrinsic value of the work. The paper

and typography will compare favorably with those of similar treatises in England.

In his account of the appendages of the eye, the author has inadvertently fallen into an error respecting the discovery of the tensor muscle of the tarsus, which he ascribes to the late Professor HORNER, of Philadelphia, by whom it was first introduced to the notice of American, French and English anatomists in 1823. If he will refer to Dr. J. C. ROSENMULLER's excellent "*Hand-buch der Anatomie des Menschlichen Körpers*," the third edition of which was published at Leipzig in 1819, he will perceive that Dr. HORNER was anticipated a number of years by the German author.

In describing the *ocular fascia*, which has been made, of late, to play so conspicuous a part in the diseases of the eye, no mention is made of the fact that that structure was first accurately delineated by a gentleman of this city, several years before it began to attract the attention of English and continental writers, in connexion with the subject of strabismus.

These little matters, however, are circumstances of no moment, and such as might very readily have occurred to any one, however extensively acquainted with the literature of anatomy.

One of the most commendable and interesting features of the present work, is the substitution, where this was practicable, of English for Latin terms. In perusing the works on anatomy, hitherto published in this country and Great Britain, the reader's eye and ear are constantly shocked by the monstrous character of the nomenclature which pervades and disfigures every page of these writings. If we must have Latin names, let us have them by all means, but give them to us in their pure and undiluted state, not intermixed at every line with English. Is it not very absurd, for instance, to speak of the internal mammary vein in one paragraph, and in the one immediately succeeding it of the *vena azygos*, of the femoral artery and of the *arteria profunda*, the common carotid and the *arteria innominata*, the parietal bone and the *os frontis*, and, not to multiply examples, of the semi-lunar valve of the eye and the *musculus levator palpebræ superioris*. In our judgement, nothing can possibly be more barbarous, or more repugnant to good taste, than such a medley. The work of our author, will, we doubt not, go far to correct a

practice which, while it is in every respect offensive to good taste and good scholarship, admits of no excuse, because there is really not the slightest necessity for it. We have for many years deprecated this practice in the lecture-room, and in a treatise on anatomy, prepared many years ago, but which has never been completed, we adopted precisely the same method as that set forth in the work under consideration. The author deserves much praise for having set an example, which is sure to find many imitators. In France and Germany a uniform anatomical nomenclature has long been in vogue, as every one acquainted with the anatomical literature of those enlightened countries is aware.

Another important feature of the work, is that it combines general with descriptive anatomy, and descriptive with practical, thus enabling the student to investigate these different departments, without compelling him to purchase separate treatises upon each. With many of our pupils this is a very serious desideratum; for to say nothing of the inconvenience involved in referring to different works on the same branches of science, not a few of them are in straitened circumstances, and can, therefore, ill afford to spend their means in this manner.

Finally, the style of the work is always clear and accurate, and hence the author never fails to make himself perfectly understood. Nothing of the ornate is any where visible, for the reason that any attempt of this kind would have been highly inappropriate, if not ridiculous, in a treatise rigidly scientific and descriptive. The author has executed his task ably, faithfully and systematically. Practically conversant with the dissecting-room, he has written from observations made upon the dead subject, and thus produced a work admirably adapted to the wants of the medical student. "*C'est*," says Mons. H. Cloquet, "*avec le scalpel à la main qu'on doit faire un ouvrage d'anatomie.*"

We have said that the author of this work is a young man. This circumstance, so far from being an objection to the work, constitutes one of its chief claims to public patronage. Who but a young man can fully appreciate the wants of the student of practical anatomy? Who but young men frequent the dissecting room? If the work were one on practical medicine, surgery, or obstetrics, we should naturally expect the author to be an older

man, not necessarily, however, because old age does not always bring experience; but in a work of this kind, age alone does not confer knowledge, nor necessarily imply wisdom. It would not be difficult to find in the various walks of literature—philosophy, poetry, jurisprudence, theology, medicine, natural history, and physical science—examples of young men who have produced great and noble works as the fruits of their early observation and industry. To go no further than our own profession, it may be stated that ANDREAS VESALIUS, the great anatomical reformer in the sixteenth century—the man who performed the same service for anatomy that Luther performed for religious and political freedom—published his work, "*De Structura Corporis Humani*," when he was scarcely twenty-five years of age, and RICHARDSAND gave to the world, almost before he had attained his majority, his celebrated "Elements of Physiology," one of the most erudite and beautiful treatises of the kind that have ever appeared in any age or country. It was in view of this circumstance that the French author was induced to insert the following sentence in his preface: "If any one should conceive the present undertaking to be above the capacity of my age, I will say, even at the risk of a paradox, that young men are, perhaps, best fitted to compose elementary works; because the difficulties which they have encountered in their studies, as well as the steps which they have taken to overcome them, are still fresh in their memory."

We do not make these remarks by way of apology for our author, for no apology is necessary when a task has been so well executed; nor do we use the phrase "young man" as synonymous with that of "young physic." With the latter we feel no very particular sympathy. True progress, active, steady, persistent exertion, directed to the accomplishment of a specific object, or to the attainment of some great end, requires not the patronage of any particular name for its full and perfect development. Men are judged, the world over, by the result of their labors, as the tree is by its fruit, and it has yet to be shown that mere idle boasting, mere vaunting expressions, or the adoption of a new-fangled name, has ever added one jot or tittle to the advancement, the dignity, or the influence of the medical profession. If "young physic" has done any thing in this way, we are free to confess our ignorance of the fact.

Art. IV.—HOMŒOPATHY, ITS TENETS AND TENDENCIES, THEORETICAL, THEOLOGICAL, AND THERAPEUTICAL.

By James Y. Simpson, M. D., F. R. S. E., *Professor of Midwifery, University of Edinburgh; and Physician-Accoucheur to the Queen for Scotland. President of the Medico-Chirurgical Society, and of the Obstetric Society; lately President of the Royal College of Physicians; formerly President of the Royal Medical Society, and of the Royal Physical Society, Edinburgh; Foreign member of the Imperial Academy of Medicine of France; member of the Society of Surgery of Paris; and of various Medical Societies in Stockholm, Copenhagen, Berlin, Ghent, &c., &c.* First American, from the Third Edinburgh Edition; Philadelphia: Lindsay and Blakiston, 1854.

Of all Medical heresies, Homœpathy has stood its ground for the greatest length of time, and exerted the most potent sway over the minds of men; and yet that it *is* a heresy no one can doubt who has looked into the subject. Our belief is, that the Homœopathists themselves have no faith in their medicines. We do not think it possible for any man, in his senses, to believe that the billioneth or decillioneth of a grain of oyster-shell, or camomile, or belladonna can exert the slightest possible effect upon the economy. Hahnemann, its founder, never believed it; in truth he had no faith in medicine, but thought sick people would be none the worse if left to themselves; and this is precisely where his system leaves them—with the *vis medicatrix naturæ*. He avowed that he gave medicines very seldom, though, he was in the habit of adding, he always prescribed *small powders*. He gave the "small powders" for the sake of keeping up in the patient's mind the belief that he was taking medicine. It was his observation, that most patients will recover by a simple regimen, and by the exercise of a boundless confidence in their medical attendants.

This is now believed, by all men who have thoroughly investigated the pretensions of Homœopathy, to be the principle upon which this most absurd system has so far succeeded. But our patients do not understand the secret. They see pulsatilla, acomite, and oyster-shell administered in infinitisimal doses and the subjects of the practice getting well. Homœopathy seems to them to cure the disease. How are they to learn where the fallacy lies? We answer, physicians must instruct them. The public must be informed through the medical profession. Let common sense be appealed to; let men understand what Homœopathy professes, and they will open their eyes. They will not discredit the cures which they have seen taking place under the lilliputian doses, but they will learn to laugh at the ridiculous assumption of the Homœopathist to have made them by his oyster-shell or belladonna globules. They will see that the cures were the work of nature, and not of the inane and negative practice resorted to. Most of the practitioners of this sect, and we incline to think all, fully understand this principle, and only apply Homœopathy in cases where the utility of more potent medication is not clearly apparent. They spread out the snare of their system "as a golden man-trap to catch credulous and trusting patients, and afterwards either openly or surreptitiously apply to them all the usual means employed in the armentarium of rational medicine." They give their remedies by the billionth of a grain in obscure or trivial cases, but by grains and scruples where experience has taught the efficacy of the article. They wish to be considered Homœopaths, but take care to drug their globules with active doses of the most powerful medicines. There was far more of knavery than of folly in the old inventor of this humbug, as his biographers have proved, and his followers, in this respect, have borne but too striking a resemblance to their master.

Homœopathy has become one of the facts of the times—not a "fixed fact," we think, but one which meets us in our professional rounds, and stares us in the face whenever we look out upon the world of physic. We cannot shun it nor blink it. It has got into high places, and ranks among its advocates men of science and note. We must, as a profession, deal with it, and, in the shortest practicable time, dispose of it. It has been exposed again, and

again. Dr. SIMPSON, in the work before us, has exposed it once more, and his exposure is so thorough and complete that we have determined to treat our readers to some extracts from his eloquent and admirable book.

Some illustrations of HAHNEMANN's well known principle, *similia a similibus curantur*, are given by Dr. SIMPSON, which will probably be new to our readers, and we suspect, would startle the dupes of the Homœopathic practice. Dr. MURE, it seems, one of the ablest writers of this sect, has lately made the discovery that *itch* (the prolific source of our bodily ills, according to HAHNEMANN) is to be cured by small doses of lice, or lice-tea. Upon the same principle, "bugs in the thirtieth dilution," are recommended for curing the inflammation arising from bug-bites; the matter ejected by Cholera patients, after being "potentized," is to be swallowed for the cure of cholera; yellow-fever patients are to swallow the black vomit, duly prepared; the scales of scarlatina are used as a prophylactic against that disease; leucorrhea is cured by potentized leucorrheal matter, and the expectoration of phthisis is given to consumptive patients. DRS. TIETZE, SCHNAPPAUF, and other German Homœopaths with unpronouncable names, have lately treated small-pox patients with doses of the matter of small-pox and cow-pox. We wonder if human folly can descend to lower depths than these. When the deluded subjects of this practice come to understand the species of medication to which they have been submitting, can any one doubt that they will turn away from it with loathing and indignation?

But the Homœopaths are too shrewd to trust entirely to such remedies as these; they fully comprehend the method of inspiring their subjects with faith in their globules. The following extract contains the confession of one of these practitioners:—

"Patients who are skeptical of the truths of Homœopathy, from a love of variety, or a hundred other reasons, will consult you. As these persons are inclined to ridicule infinitesimal doses, it is sometimes highly useful to give them powerful doses of various highly concentrated medicines, in globules similar in appearance to all the rest, but consisting of morphia, strychnine, arsenic, corrosive sublimate, and such like; a few of these mingled with your sugar and starch globules will cause effects to be felt by the skeptic which will quickly overcome his disbelief; he generally

makes an excellent patient, and often a good decoy duck. Never scruple in paralytic cases to give strychnine largely, but never allow it to be supposed that you are giving more at a dose than the one-hundred-thousandth of a grain. This rule may be followed in other complaints with other very active drugs, such as croton oil; but this is one of our profoundest secrets, and must be kept so. Were it known, our wonder-working powers would be reduced in the estimation of the public and the regulars."

"It holds good," says HAHNEMANN, "and will continue to hold good as a Homœopathic therapeutic maxim, *not to be refuted by any experience in the world*, that the best dose of the properly selected remedy is always the very smallest one, as well for chronic as for acute diseases." His smallest dose, which he holds to be his most powerful, is the decillionth of a grain or of a drop of the drug, whatever the drug may be, strychnine, arsenic, or oyster-shell. What is this dose—*the decillionth of a grain?* Dr. SIMPSON attempts to give his readers some conception of it by the following illustration:—

"I have already stated that the earth is computed to contain, at the present time, some 900,000,000 human beings; and that if all these 900,000,000 had been called into existence when Adam was created—some 6000 years ago—and had lived up to the present time, and each of these 900,000,000 individuals had, when first called into existence, begun to swallow, and continued to swallow up to the present hour, without rest or cessation, night and day, a decillionth dose of a grain (say a grain of sulphur or quinine, or other drug,) such as Hahnemann recommends to be used, these 900,000,000 beings would not yet, during these past 6000 years, have finished one single grain of the medicine. Nay, if each of these 900,000,000 men, now 6000 years old, had swallowed, during *every* moment of their past existence, not a single globule, but *one million* of globules of Hahnemann's 30th dilution, they would not yet have finished a single grain, and would not finish it, working constantly every second at the same rate, for millions of centuries yet to come.

"Yet Hahneman and his followers calmly tell us, that—take two or three of these single decillionth doses of a single grain of their drugs, and with these infinitesimal doses of the requisite medicine you may cure any acute or chronic curable disease to which mankind is liable. And that one of these decillionths is truly the proper dose of the medicine to be used, is "a therapeutic maxim (says Hahnemann) not to be refuted by any experience in the world."

"To understand, if possible, the exiguity of "the best" dose of

a homœopathic drug as thus laid down by Hahnemann, let us turn to another means of stating the infinitesimal amount of the dose. For this purpose let us suppose, merely for the sake of illustration, that the drug employed was commixed with a mass of sea-sand, as its vehicle or medium, instead of a mass of sugar or starch, such as is employed in forming homœopathic globules and powders.

"Most rational men, whether acquainted with medicine or not, would surely and justly look with perfect incredulity upon any physician who should maintain that *one* single grain of sulphur (to take it as an example) properly commixed with a heap of sand made by reducing to powder the stones, &c., employed in building and rearing all the houses in Edinburgh, or in London, or in Great Britain, would impart to each of the particles of the heap a sufficient amount of sulphur to enable it, if swallowed, to be a proper and sufficient dose for curing a man of itch. Or if some enthusiast were to spring up and aver that a single grain of phosphorus or of aconite, so infinitely divided, that an equal portion of one grain of these drugs distributed among *all* the particles of sand that lie on all the sea-shores of Great Britain, from Caithness to Cornwall, could change and medicate each one of these grains of sand, so that any dozen or two of them picked up along the coast of England or Scotland would, if swallowed, be certain to influence and cure a case of inflammation of the lungs, or of inflammatory fever, if given to men affected with these diseases, would the world not deem the asserter of this fact to be stating something beyond the bounds of mere extravagance and excentricity? And, if our supposed enthusiast were further coolly and deliberately to aver, that his single grain of phosphorus or aconite, if divided amongst all the grains of sand to be found along all the sea shores of our world, would equally, if not more certainly, cure the same inflammation or fever, would he not be looked upon as a man outraging every principle of possible belief? But the Homœopaths aver infinitely more than this. Hahnemann and his followers, in using the 30th dilution of aconite, phosphorus, &c., aver that a *single grain* of any of them, distributed equally through a mass of sand as large as the bulk of the whole earth itself, or indeed through a mass of sand even millions of millions of times greater than the earth, would bestow the same healing property upon one and all of the particles of sand forming these immense masses, and that any ten or twenty of these medicated particles would form "the best" dose of the drug for the supposed case of pneumonia or fever.

"It has been computed that a cubic inch of sea-sand contains a million of particles of sand. The globe of our earth is reckoned be physical geographers to contain about four thousand millions of cubic feet, or nearly seven quadrillion cubic inches. If the

whole mass of the earth from its surface to its centre were bruised down and converted into sea-sand, and a single grain of any homœopathic drug, as a grain of sulphur, or aconite, or phosphorus, were so commixed with the sand that each particle of sand had a proper relative share or allotment of this single grain, each of these particles would contain *more* sulphur, or aconite, or phosphorus, than the homœpaths use when they use the decillionth of a grain of sulphur, or phosphorus, or aconite, or any other of their drugs in the 30th dilution. It would require, in fact, a mass of sea-sand millions of times greater than the whole mass of the earth to reduce each particle of sand to a homœopathic decillionth.—Or, to state it otherwise, a decillion of particles of sea-sand would make a million of worlds or globes as large as the earth. The diameter of the earth is nearly 8000 miles; the diameter of the orbit of Neptune is nearly 6000 millions of miles; a vast difference. But even a world or sphere of sea-sand, with a diameter equal to that of the orbit of Neptune, would not have its particles reduced to a decillionth. In other words, each of the single particles in this vast mass would be larger than a decillionth of the whole; and the proper dose of a single grain of a drug divided equally among these decillionths would be one particle picked out of this inconceivable mass of sand.

"In order to impart to the human mind some faint, very faint, idea of the enormous distance of the stars, writers on astronomy have had recourse to a variety of illustrations. It has been computed that a cannon-ball, impelled with the greatest velocity which art can produce, would travel at the rate of 600 miles an hour; and flying at this rate, would require twenty years to pass from the earth to the sun, and about five millions of years ere it could reach the nearest fixed star. But the velocity of light is immensely greater. According to Struve's late investigations, it flies at the rate of 166,000 geographical miles, or nearly 200,000 English miles, in a second. Travelling at this enormous rate, a ray of light passes from the Moon to the earth in 1¼ second; from the Sun to the earth in 8 minutes; but would require about three years to travel from the fixed star *a Centauri* to the earth. Other stars, however, are vastly more distant The elder Herschel calculated that light, travelling at the enormous velocity we have stated, would require almost two millions of years to pass to the earth from the remotest luminous vapour reached by his forty feet reflecting telescope. And Professor Nichol imagines, from later observations with stronger instruments, that possibly there may be stars "situated so deep in space that the rays of light from them do not reach our earth until after travelling across intervening abysses during centuries whose number stuns the imagination." Possibly there may be some, he imagines, from which

light would require to travel *thirty millions of years*, in order to reach our planet.

"Truly, such astronomical calculations do, as Professor Nichol observes, "stun the imagination" of man. They are as naught, however, in comparison with the ideas and computations of homœopathists. For one single grain of any homœopathic medicine, as sulphur, quinine, silex, &c., &c., &c., divided into decillionth globules of the 30th dilution, and arranged as twenty globules to the inch, would form a continuous line or string of globules reaching far, far beyond this inconceivable profundity in space. In other words, this grain of sulphur, &c., &c., &c., would, when divided into a decillion of homœopathic globules, make a line over which light, travelling at the rate of 200,000 miles in a second, would require above 1,000,000,000,000,000,000,000,000 years to pass along. Yet, aver Hahnemann and his followers, any one of these decillion globules of a single grain of the proper drug, picked out of this inconceivable length of line, would be found duly medicated for the treatment of all diseases, acute and chronic, and would form the most appropriate dose for their treatment. Truly the human imagination sometimes rapidly passes from the sublime to the ridiculous.

"A row of homœopathic globules, extending enough to form a string 25,000 miles long, and which consequently could encircle the earth, would be passed over by a ray of light in the eighth part of a second, or "in the twinkling of an eye." But it would require a ray of light to travel millions of millions of millions of years, before it could pass from one end to another of one single grain of sulphur, or any other homœopathic drug, laid out in homœopathic decillionth globules,—such as Hahnemann used and declared to be, both in acute and chronic diseases, the proper medical dose, "not to be refuted by any experience in the world." A continuous row of globules from Edinburgh to London—or, in other words, a row of them as long as an express railway train would take twelve hours to pass over, might, at first thought, appear extravagantly long, particularly when it was alleged that all of these numerous globules could have subdivided among them a single grain of a drug, so as to impart to *every* globule in the line the medicinal action of that drug. But how comparatively short is a 400 mile line of globules, to a line of them so extended, that light, travelling at the rate of 6,000,000,000,000 miles a year would take above 1000 sextillions of centuries to fly along it? And yet, as Hahnemann asserts, *one single grain* of a medicine distributed equally along this enormous line of globules, would invest *each* of the constituent globules with a power of curing diseases; and forms, in fact, *the* best and appropriate dose of each common drug.

"Some homœopaths, however, use their drugs not in GLOBULES or

particles, such as the preceding illustrations refer to, but in TINCTURES or Solutions. Let us consider for a moment the tenuity of these homœopathic solutions or tinctures.

"Soon after the promulgation of Hahnemann's doctrines it was suggested that, "If the decillionth part of a grain have any efficacy, an ounce of medicine (Epsom salts) thrown into the Lake of Geneva would be sufficient to physic all the Calvinists of Switzerland."

"But more careful systematic calculeulations have shown that this is stopping infinitely short of the truth; and that the 30th homœopathic dilution, recommended as we have seen by Hahnemann in all cases, is, in such a parallel, enormously understated, instead of over-stated. In fact, the 10th solution alone would, as Mr. Cap has shown, require for its proper solution, a body of water 500 times greater than the bulk of the Lake of Geneva; or a sea somewhat larger than the Gulf of Venice. To make the 11th solution, a quantity of water greater than the Mediterranean Sea or the German Ocean would be necessary. The 12th solution could scarcely be accomplished in a sea extending over the whole surface of the earth, and 500 fathoms in depth. And if the whole Solar System were buried in an ocean extending in depth from the Sun to Neptune, it would not form a sufficient fluid medium for adequately dissolving to the 30th dilution a common dose of any of the common medicines of the homœopathists. Yet the homœopathists allege, a few drops or sips of the proper medicine, properly dissolved in such enormous medicated seas and oceans, infallibly acts and cures; and that each drop would be found of "terrific potency," if the drug were duly mixed."

It is sometimes asked, how does it happen, if Homœopathy be such a nullity, that some eminent and able physicians have been made dupes to the delusion? We can only answer the question by pointing to the fact, that as eminent and able medical men have been carried away, in times past, by fallacies just as absurd. There were noted and learned physicians, half a century ago, who gave themselves up to the follies of Perkinism, who believed as firmly in the virtues of the metallic tractors as Dr. HENDERSON (of whose conversion we quoted from the work under notice an amusing account in our last number) does in the powers of the microscopic globules. Nay, have we not seen distinguished physicians, in our own day, stoutly insisting upon the truth of *clairvoyance?* The truth is, there is nothing too absurd to be embraced by minds of a certain stamp, and unfortunately not a few of these have been enlisted, in every age, in the service of medical quackery. Honest,

conscientious men they have often been, but with minds incurably prone to humbug. With some mental infirmity, or else a self-esteem which led them to suppose themselves wiser than all other men, they have been the ready victims of impostures which the common sense of mankind at once detected. What at this moment is passing before our eyes? The whole credulous world led captive by "Spiritualism," by table-turning, and table-knocking, and in the mixed multitude of deluded followers a goodly proportion of medical men.

It is no argument for the truth of a system that it has respectable advocates, since as we have seen the most monstrous systems have found ardent and sincere adherents. But then, as has been admitted, there is that in Homœopathy which bears the semblance of truth, and which has kept it fresh and comparatively vigorous amid the decay of so many kindred fallacies. It inspires the sick with confidence, and leaves their cases to nature, which happily, is competent to the cure of most of them. But the delusion is on the decline. It is fast dying out in Germany, the land that gave it birth, and is losing ground in France and Great Britain. It will yield last in this country, but already we begin to perceive unmistakable signs of its decadence. This work of Dr. Simpson will hasten its dissolution, and for this reason we greatly desire to see it attain a wide circulation. We assure our readers that they could not procure a more *piquant* book, one abounding more in curious facts and instructive details, relating in any way to medicine, than it is. Let it be read and its incontrovertible facts given to the people.

Editorial Department.

UNIVERSITY OF LOUISVILLE.

THE eighth session of the Medical Department of the University of Louisville, and the seventeenth of the School, closed with a public Commencement, in the Chemical lecture room, on the evening of the 3d inst., in presence of the officers of the Institution and of a large assemblage of ladies and gentlemen. The exercises were opened with prayer by the Rev. Dr. W. L. BRECKINRIDGE, after which the President, *pro. tem.*, of the Board of Trustees, JAMES SPEED, ESQ., proceeded to confer the degree of *Doctor of Medicine*, upon seventy-nine young gentlemen, who had passed satisfactory examinations before the Medical Faculty, and complied with the other requirements of the University. The honorary degree of *M. D.* was conferred upon Dr. J. P. EPPERSON, of Pulaski, Tenn., and the *ad eundem* degree upon Dr. PLEASANT B. ROBINSON, of Huntsville, Ala., a graduate of the Cincinnati Medical College. Prof. SILLIMAN pronounced the Valedictory Address to the Graduates on behalf of the Faculty. It was an address of uncommon merit, abounding in just thoughts, and elevated sentiments, forcibly and eloquently expressed. The subject was Education and the duties of educated men. Prof. S. urged the importance of a higher standard of education in our country, as a means of correcting the tendency of the public mind to embrace quackery in all its forms. He showed that the effect of thorough scientific knowledge was to suppress superstition. In order to the creation of a class of scholars profoundly skilled in all the departments of human knowledge, he insisted that it was necessary that we should have an institution of a higher order than any now existing in

our country—a *National University*, where the graduates of our Colleges and Universities might repair to perfect themselves in their chosen departments of science or art.

At the close of his address, Prof. SILLIMAN announced that he was then performing his last official act in the University of Louisville, having already tendered his resignation to the Board of Trustees. He would not attempt, he said, to describe the contest of feelings through which he had passed in reaching that determination. He had experienced great difficulty in coming to it, but Providence seemed to have indicated that it was his duty to return to the theatre of his earlier labors. He spoke of the perfect harmony that had prevailed in the Faculty, and of his pleasant relations with all the members who had belonged to it during his connection with the school, in handsome and fitting terms. He returns to New Haven, to occupy the place of his distinguished father, in Yale College, and we have no doubt that he will satisfy the highest expectations of his friends in his new sphere of action. To the ample stock of chemical knowledge, and his expertness of manipulation in the laboratory with which he came to the University, he now adds several years of the most valuable experience as a public teacher. He bears with him the confidence and best wishes of his colleagues and pupils.

The session which terminated with these exercises was a pleasant and entirely prosperous one. The class was larger than any preceding one since the year 1849, numbering two hundred and eighty-seven. The graduates presented a fine appearance, and among them are men capable of reaching any point they desire in their profession. No class, we are persuaded, ever retired from the institution more favorably impressed with it as a seat of medical learning. The lectures, the hospital, the University Clinic, the dissecting rooms, all gave satisfaction. It is gratifying that the school, for a long time past the great school of the Mississippi Valley, has maintained its relative rank among the medical schools of the United States notwithstanding the temporary declension of its classes, being still the third in point of numbers; and the causes which affected it injuriously having ceased to operate, its friends have a right to indulge in expectations of its continued prosperity. The Board of Trustees have a fund at their command which ena-

bles them to make large annual additions to the library, museum, and all the apparatus of medical instruction. The reputation of the School is such, that they have no difficulty in filling vacancies, when they occur, with men of repute. The Chair of Chemistry now vacant, they are resolved to fill with a Chemist of distinction.

Prof. FLINT has sailed for Europe where he will spend the vacation, visiting the hospitals of the chief cities, and making purchases for the University. He expects to return early in October.

DR. WILLIAM S. CHIPLEY.

WE are glad to learn that our friend, Dr. W. S. CHIPLEY, has been elected Professor of Theory and Practice of Medicine in Transylvania University. It is the best appointment the Trustees could have made. Dr. CHIPLEY is a man of real ability—a scholar, a student, a practitioner of large experience, a strong writer, and impressive, fluent lecturer. He has been one of our most esteemed correspondents, and was a short time since President of the Kentucky Medical Society.

REPUBLICATION OF ENGLISH WORKS.

OUR learned correspondent, in his remarks on reprints of English works by American publishers and their indiscriminate praise by our medical journals, is hardly just, we think, to those who have control of the medical press. No doubt the laudation is quite too general, and that the system is injurious to our native literature; but we are sure that our able correspondent has not hit upon the true explanation of it. The real cause is not selfishness, but indolence; it is easier to praise a book in general terms than to criticise it intelligently, and this is the chief reason why the praise of foreign works is so indiscriminate. We take their merits, for the most part, upon trust, without thorough, much less critical, examination. We are free to confess our short-comings in this particular, and suppose most of our brethren would have to own, that, in the press of other urgent duties, they have sometimes been tempt-

ed to commend hastily. But there is this to be said in extenuation of the practice, which certainly cannot be justified, that the wheat which comes to us across the Atlantic has generally been thoroughly winnowed at home, and but little of the chaff is likely to reach our shores. It is a rare mistake for one of our shrewd publishers to fall upon a worthless English book. They have had the benefit of all the light of the English periodical press, and seldom venture upon a republication until the book has run the gauntlet at home. Still, we agree with our correspondent, that we ought not to be contented with this state of things. It is time we had declared our independence of the mother country in this particular also, and as a profession had set up for ourselves. Let us encourage our own writers; let us foster our own indigenous literature.

TENNESSEE HOSPITAL FOR THE INSANE.

The Report of Dr. W. A. Cheatham to the Legislature of Tennessee on the Hospital for the Insane under his charge, is a document of great interest, and reflects credit upon his judgment, patience, and skill as Superintendent and Physician. Dr. Cheatham entered upon his duties an untried and inexperienced man, but, his report shows, not without high qualifications for the delicate and responsible office. His success has been most gratifying. No institution of the kind in our country can show better results for the last year, which is the first year of this noble charity. It is conducted upon the true principle—that of gentleness and benevolence. All that science and experience have done to ameliorate the lot of the insane in other asylums has been introduced by the enlightened Superintendent into this. He is equally fitted by nature and professional study for the management of such an institution, and under his wise administration it will prove an ornament and a blessing to the State. The situation of this Hospital is well chosen; it is in a beautiful and healthy country, a few miles from Nashville. In proof of its salubrity it is stated by Dr. Cheatham, that "for nearly a year but one death has occurred" in the Asylum.

AMERICAN MEDICAL ASSOCIATION.

The next meeting of this National Society, our readers will please not forget, is to be held in St. Louis, in a few weeks from this time—it commences on Tuesday the 2d of May. All societies entitled to representation ought to see to the appointment of delegates who will attend the meeting. It is not to be expected that so large a number of Eastern members as have attended upon former meetings will be present at this, owing to the great travel necessary to reach the place of meeting, and for that reason there should be a much fuller attendance from the West. We trust that the strength of the western profession will be there. We owe it to ourselves to foster this Association; it is a high professional duty. If through the apathy of the members of the profession it should be allowed to languish, the whole profession would feel it.

The delegates from the University of Louisville are Prof. S. D. GROSS, and Prof. LEWIS ROGERS.

KENTUCKY MEDICAL SOCIETY.

The State Medical Society of Kentucky was organized, at Frankfort, in October 1851. The following October it met at Louisville, and was well attended. The proceedings excited a great deal of interest. A number of very able reports were read, and formed a volume of transactions creditable to the medical profession of Kentucky. The Third meeting of the Society was held, in October last, at Lexington, but although great preparations had been made by the physicians of that city for the reception of the Society, and though the committees appointed to make reports had been industrious in preparing for their duties, the attendance was small. The meeting was a spirited one, and the reports read were elaborate and thorough; but the state of the Treasury, owing to the small number of members present, is such that the Proceedings are not likely to be published. It is feared, that the first volume which elicited so much praise and was regarded by the Society

with so just a pride, will also be the last. This is not worthy of the profession of Kentucky. We had expected a different result. The beginning was so spirited, so full of promise, that we had counted on seeing the Society go on from year to year growing in fame and usefulness, extending its researches, developing the medical history of the Commonwealth, and animating the members of our profession with a livelier zeal for its advancement. We still hope that new energy will be infused into it, and that we shall yet see it successfully pursuing its high mission. From the following card it will be seen, that Dr. R. J. Breckinridge is collecting the materials for a report on the "Medical Biography of Kentucky," and we would urge our Kentucky readers to respond to his call:

"It is the duty of the undersigned to make a report to the State Medical Society, at its next annual meeting, on the Medical Biography of Kentucky. The suitable discharge of this duty requires the assistance of medical men throughout the State. The undersigned earnestly desires to receive from *all* persons friendly to an attempt to preserve a record of this kind, brief notices or fuller sketches of deceased physicians who have spent the whole or any large part of their active professional life in this State—who have been identified with the profession here, either as teachers or practitioners of medicine.

That this record may be as complete as possible, it is desirable that the notices sent should be full and minute, though meagre ones will be more acceptable than none.

They should be forwarded before the 1st of September, and as much earlier as may be convenient.

R. J. BRECKINRIDGE.

Louisville, February, 1854.

DR. STOKES ON FEVER.

Dr. Stokes admits that his opinions in reference to fever have undergone a great change since he first became a lecturer on the Practice of Medicine. After describing the former practice, in a lecture recently delivered in the Meath Hospital, Dublin, he says:

"The treatment of fever is reducible to a simple formula. We cannot cure fever; no man has ever cured fever. Fever in this sense may be called incurable, because we don't know how to cure

it. It is, however, curable by itself. If you leave it to its own course, it will often cure itself. The great object, then, is to preserve the patient's life from the dangers which threaten him, pending the existence of this condition of fever—of this special state of life. If you can keep him alive to the fourteenth day, or the eighteenth day, or the twenty-first day, he will recover. What are the dangers that occur in these cases? One I have already pointed out to you—it is the danger of debility; the other is the danger arising from the accidental secondary affections. We cure the patient by preventing him from dying. We lead him on to that period when by the extraordinary law of the disease, it will itself spontaneously terminate. We prevent him from dying of exhaustion, by food, by the use of stimulants, and by tonics. We save him from the danger which the local diseases may expose him to, by meeting them as early as we can discover them. And herein lies the whole secret of the treatment of fever—to preserve the patient, at the least expense to his constitution, up to the time when, by the natural law, the disease will spontaneously subside.

DEATH OF MEDICAL EDITORS.

We record with pain the death of Dr. HESTER, Editor of the "New Orleans Medical and Surgical Journal." Dr. H. died of epidemic cholera on the 1st of December last, aged forty years. In 1844, in conjunction with Dr. E. D. FENNER, he established the journal mentioned, and after the withdrawal of Dr. F., he continued to conduct it alone, with eminent ability and success, up to the time of his lamented death. He was a man of high character, an able, independent journalist, an acute, forcible writer, and a physician greatly esteemed. The New Orleans Journal, for which he labored with uncommon industry, has acquired a wide popularity, and been productive of the happiest results to the profession.

Dr. RICHARD L. HOWARD, Professor of Surgery in Starling Medical College, and Editor of the "Ohio Medical and Surgical Journal," died of pneumonia, consequent upon Bright's disease, on the 15th of January, in the forty-fifth year of his age. His health had been declining for many months, and about a year ago albumen was detected in his urine. Dr. H. was a popular and instructive teacher, and as an Editor was courteous, dignified, and judi-

cious. He did not write a great deal, but what he did produce gave evidence of a strong, discriminating mind. He was much beloved by his pupils, and maintained among men the character of a pure, upright man. Struggling in early life with poverty and many adverse circumstances, he rose to a position where ease, honor, and wealth seemed within his reach, but at a moment when life was most full of promise untimely death came to blight all his earthly prospects.

In the death of Dr. HESTER and Dr. HOWARD, our profession has lost two valuable and honored members, and the editorial corps two of its ornaments. Dr. HESTER is succeeded in the editorship of the N. O. Medical Journal by that learned and original writer, Dr. BENNET DOWLER, and Dr. JOHN DAWSON, also a writer of great industry and learning, takes charge of the Ohio Medical Journal. We hardly know the equals of these gentlemen for patient, induring application, and with such attainments as they have made in their profession, and such practice as they have acquired as writers, added to their laborious habits, there is reason to expect that these journals will attain a still higher standing under their direction.

BOOKS RECEIVED.

We have received a great many books of late which we can only acknowledge in the present number. We shall speak more particularly of them hereafter.

We are indebted to Dr. LAROCHE, of Philadelphia, for an interesting monograph on Pneumonia and Autumnal fevers, in their relation to Malaria.

Dr. BENNET DOWLER has sent us his "Tabuleau of the Yellow Fever, of New Orleans, in 1853," which is distinguished for research, as are all the productions of this laborious physician.

Our thanks are due to Dr. FENNER for an able monograph on the same subject. We hope to find room for an abstract of both these works in our next number.

PROF. FLINT has favored us with Reports on Dyssentery and Chronic Pleurisy. These reports are based on the analysis of nu-

merous cases, and will be found to embrace many valuable facts, and to be singularly free from vague generalizations.

Besides these, we have also received the profound treatise of Mr. LAWRENCE on Diseases of the Eye, edited by Dr. ISAAC HAYS, a standard work on this important subject; the second volume of PEREIRA's encyclopædian treatise on Materia Medica; a treatise by M. A. VIDAL (*De Cassis*) on Venereal Diseases, translated and edited by Dr. GEORGE C. BLACKMAN, of New York, who has made valuable additions to the original; a Practical Treatise on Inflammation of the Uterus, by Dr. JAMES HENRY BENNET, who has become so eminent for his attainments in this speciality; the Lectures on Surgical Pathology, by Mr. PAGET; a Manual of Obstetrics by Dr. T. F. COCK, of New York; a new edition of ELLIS' popular Medical Formulary; a new edition of BUDD's admirable work on the Liver; and a treatise on Diseases of the Ear, by Mr. WILDE, Fellow of the Royal College of Surgeons, of Ireland, &c.

To these, we have to add the Seventh Annual Report of the Board of Regents of the Smithsonian Institution, for the year 1852; and the Annual Reports of the Pennsylvania and Indiana Hospitals for the Insane. Just as this number was going to press, we had the pleasure to receive from our friend, Dr. W. L. SUTTON, the First Annual Report on the Births, Marriages and Deaths, in Kentucky, from January 1, 1852, to December 31st, 1853, digested and prepared by that indufatigable physician. The mass of statistics herein presented by Dr. SUTTON is full of interest and instruction. We shall hasten to avail ourselves of it.

EDITORIAL CHANGE.

Dr. JOSEPH PARRISH, who for a number of years has edited the "New Jersey Medical Reporter" with excellent taste and judgment, and given it a high character among the Medical Journals of our country, has gone to Philadelphia to reside, and the Reporter is to be edited, in future, by Dr. G. M. BUTLER.

Record of Medical Science.

HYSTERICAL MONOMANIA.—By I. P. COLEMAN, M. D.—In October, 1852, I was called to Mary ——, a young Irish woman; aged 18, affected with what I supposed to be hysterical convulsions. The symptoms were strong muscular movements in both upper and lower extremities; violent contortions of the body, and twistings from side to side, head thrown back, face flushed, eyelids closed and tremulous, arms forcibly brought against the breast, and hands grasping at the throat, with a whining cry of distress. The attendance of two persons was required to keep her in bed.

The use of valerian and cathartics calmed the nervous tumult so satisfactorily that I made but three visits, and heard no more of the case until the following June. At that time rumor was busy upon the strange phenomena taking place at the house of her employer. I went thither, and obtained the following history, viz: the nervous irregularity had been comparatively quiet for some time after my former attendance, but in two or three months increased in frequency and violence, until the paroxysms were frightful, lasting two or three hours, with loss of consiousness, and disturbance of the affective faculties—patient extremely irritable on recovery, assailing the spectators with any missile at hand.—Complained of a knawing and tearing sensation in the stomach, and during the paroxysms the epigastric distention was so great as to excite uncharitable suspicions upon her reputation. Loss of appetite for ordinary food, but drank large quantities of milk when unobserved, as that gave most relief to the internal knawings, and quieted the commotion so frequently present; embonpoint well preserved, and complexion sanguine. The attacks were almost daily, and most frequently in the evening. The girl was fully of the opinion that she contained a living animal in the stomach. Early in June her case was stated to a celebrated doctress, who pronounced it to be either a snake or a tape-worm, and ordered fern-root to be taken in decoction. Apparently much against her inclination, she was induced to drink it, when a dreadful scene ensued. The "*baste*," as she termed it, was offended at the potion,

turned his back upon it in a rage, and made desperate lunges to escape through the œsophagus, and once blew sand into her mouth, which she ejected into a basin. The intergastric evolutions continued thirty-six hours, during which time violent spasms an maniacal ravings were almost constant; a calm then ensued, and there was tranquility for four or five days, at the end of which time a new phase was presented. Horrible sensations of strangulation, and violent, but ineffectual efforts to vomit came on, the hands were thrust furiously into the fauces, and fragments of dark tough skin forcibly extracted. The apparent agony during the efforts, was great, each paroxysm terminating with violent hysterical convulsions, turgid face, protruding eyes, throbbing carotids, and bursting jugulars, with seeming unconsciousness. Day after day such things were exhibited, but chiefly in the evening, and always in the presence of several attendants and spectators. The quality of the material changed from skin, apparently having scales, to a soft, solid substance, which when dry, resembled sweet potato in fracture and odor: also, a substance similar to wood having undergone eremacausis, and smelling like mushrooms; also, the green and ferruginous sand of the locality. The above substance to the amount of two or three pints, was forcibly thrown from the throat. then followed viscera, intestines in fragments, making five feet, a small heart, liver and trachea, all free from putrefaction or digestive erosion. At this stage of the proceedings, I first saw the patient, when she was beginning to produce bones, a few joints of small vertebræ resembling the caudal extremity of an eel, ribs, with processes for vertebral articulation, and osseous union to the sternum, with cartilaginous joint in the centre; also, several pieces of dorsal vertebræ, one having a lumbar and sacral termination, and some small bones resembling reptilian extremities. The vertebræ amounted to several inches, and were in sections of two, three, and four joints, united by some muscular and fibrous tissue, bearing the appearance of having been macerated or partially digested. As these specimens were produced at intervals of two or three days, and twelve or fourteen days had elapsed since the first exhibitions of skin, the latter productions evinced more and more the effect of maceration, until the last were nearly denuded. The absence of sound information in comparative anatomy and reptilian habitudes, together with the patient's history, and the testimony of the family,—unimpeachable in veracity, and incapable of collusion,—gave plausibility to opinions which were subsequently disproved. An Irish girl having been in the habit of drinking from a running stream at home, becomes sea-sick on the passage, feels an epigastric gnawing—one month after her arrival has hysterical convulsions, her first derangement in health; gastric irritation increases; reflexed movements in the voluntary muscles cruelly augmented; firm conviction of the existence of a living animal

within her, she takes the decoction of fern-root; convulsions aggravated; the animal dies; in six days she begins to eject skin, flesh, viscera, and bones, the first not acted on, the last very much so by the gastric fluids. A strong coincidence in chronological and physiological appearance. Although Ireland is destitute of reptiles in general, the good old Saint has suffered one variety of water lizard to remain, familiarly known as the man-keeper, which tradition says is frequently swallowed. When dissatisfied with his situation, and the unlucky wight also with his tenant, the latter has but to lie down with his mouth near a babbling stream and the reptile makes his exodus. The text books, after enumerating the parasites most common to man, have a stereotyped appendix of accidental occupants—larvæ of flies, triton palustris, lacesta aquatica, salamander, &c., and these are so modified by their new situation, as scarcely to be recognized.

The lacesta aquataca, like the tadpole, for a period after his escape from the ovum, is truly acquatic. He may possibly be swallowed in this stage of existence. Vitality, and the active principle of development in early life were supposed to be capable of resisting the digestive process. His small pulmonic, when compared with the systemic artery, proves him to require a very limited quantity of air for respiration, even less than the fishes. The law of adaptation acting so extensively on inferior animals might so have changed his habitudes as to enable him to abstract a sufficiency of air from the food and saliva. A constantly elevated temperature, and abundance of food, might have increased his development even to monstrosity. But the climax exposed the deception by producing four entire sections of lumbar and sacral vertebræ, also the skeleton and part of the carapace of the land turtle. The artfulness of these transactions adds another example to the catalogue of deceptions practiced by the hysterical, both upon themselves and their friends. I had been present during a number of the paroxysms, had seen her struggles while extracting the fragments of bone from the throat; the hemorrhage from the fauces, and the concluding convulsions, without detecting the trick, although suspecting the possibility from the first, and advising the family to be on their guard for deception. The amount of vertebræ thus exhibited is one foot in length. As there is much vagueness in the minds of physicians as to the kinds of parasites capable of existing in living animals, I give the remarks of Professor Leidy on the subject, who has kindly offered his opinion on this occasion. He says, "the bones consist of six vertebral columns of young pigeons, fragments of cervical vertebræ of the common fowl, and bones of the extremities and head, with fragments of the carapace of a turtle. The heart and intestines appear to be those of a bird. If the collection were vomited from the stomach, it of course must have been previously swallowed. Independent of the character of

the animals to which the different parts in the collection belonged, *no animal possessing an osseous skeleton* is capable of living within the *human stomach*. Serpents, lizards, toads, and salamanders, if swallowed alive, most probably would not remain in that condition a single hour; indeed, no animal whatever can live within the human alimentary canal except intestinal worms, and the larvæ of several genera of flies, as the besties or bot-fly, musca or flesh-fly, &c. There have been numerous instances recorded of the supposed existence of eels, serpents, frogs, toads, salamanders, snails, &c., in the human stomach, but upon examination they have invariably proved to be false."

Here is a case of reasoning monomania: the cause of the disease is obscure, as the functions of organic life appeared to well performed, but its character is unmistakable. The contortions described above, distention by flatus, globus hystericus, gastric pains referred to the side described as pathognomonic of hysteria. Predisposed to superstition and the marvelous, it is not singular that the idea of a living animal should be entertained. Esquirol says, "a weak understanding, but little or badly cultivated, pre-disposes to monomania." The absorbing idea in this case, was the reptile, a public declaration of its existence had been made, and an honorable obligation required its demonstration. Cunning, so vivid in the insane, devised the plan, and reason executed it as by inspiration. An ignorant girl, not apparently designing in other respects, conducts the scheme with the accuracy of a physiologist, for a time; thus the nervous agitation increases in force and frequency for several months—she takes medicine; the paroxysms are exalted; in thirty-six hours the commotion subsides; teguments are extracted from the throat, apparently flesh, viscera, bones, at first covered with tissue, gradually less and less so, until they are entirely denuded. Here the judgment failed; too great desire for notoriety exposed the trick, but not the manner of it. Quadruplicates of entire sacral vertebræ, with the skeleton of a turtle, were too much for the largest credulity.

That much of this material came from the stomach, I have no doubt, judging from personal observation and the testimony of witnesses of undoubted sincerity. The ability in some to regurgitate, is great, especially when the fauces are titilated. The absurdities of hysterical whims are proverbial. When delicately educated females drink their own urine, and vomit up to convey the impression that renal function is suspended, and the stomach doing vicarious service; or when the urethra and vagina are filled with pebbles to cheat the doctor, and the hoax not confessed until placed on the table, before a class of students, and tied, as for lithotomy, we are not astonished at any report of extravagance.

Esquirol, again, says, "when monomania does not become chronic it frequently terminates spontaneously, with or without

sensible crisis." The girl is now well, and unless the violent revulsions so frequently excited in the stomach at these exhibitions, modified some existing morbid condition of that organ, the cause of recovery is not apparent. Milk is no longer relished, and the appetite is good for ordinary food. As this case excited much interest in the country, and even among the savans of the city, it is offered to give publicity to the declaration of Prof. Leidy, "that no animal possessing an osseous skeleton, is capable of living within the human stomach."

PEMBERTON, *Jan.* 16, 1854.

DESCRIPTION OF EIGHT SKULLS OF FLATHEAD INDIANS FROM COLUMBIA RIVER.—By CARTER P. JOHNSON, M. D., Professor of Anatomy and Physiology, Richmond, Va.—In the justly celebrated "Crania Americana" of Dr. Samuel George Morton, there are described the measurements of eight skulls of the Flathead tribes of Columbia river. In the eighth section of the second part of "Schoolcraft's history, condition, and prospect of the Indian tribes of the United States," upon the "Physical type of the American Indians," also written by Dr. Morton, (the last labor of his life) seven additional skulls of these tribes are described. These fifteen skulls are all of which I have seen any accurate measurements, though others may have been published in papers to which I have not had access. Any thing which may add to the slender stock of accurate statistical information which we possess with regard to these tribes will be interesting to the public and particularly to the medical men of America.

The skulls which I propose to describe were sent to me some time since by Dr. Charles H. Smith, U. S. A., and were taken by him from an Indian mound on the banks of the Columbia river in Oregon. Of the exact location of the mound he has not informed me, and I am therefore not able to state to which of the many Indian tribes inhabiting the banks of the Columbia river these skulls belonged.

The skulls are all in a good state of preservation, with one exception, they are all adult skulls, none however presenting indications of great age. They may therefore be taken as good types of the class to which they belong. The specimen No. 8 in the catalogue (vid. table), is not fully developed. The posterior molar teeth have not made their appearance at all, and one of the second molars has but just presented itself beyond the margin of the alveolar process; the remaining three second molars are fully out. In giving the mean of the measurements of these skulls this one will be omitted.

The appearance of these skulls is very singular, and with our

idea of physical beauty, we find it difficult to credit the statement that such a conformation is actually regarded as a mark of beauty by those tribes among whom it is found, and that it is so highly valued that their slaves, who are for the most part derived from the adjacent tribes, are not allowed to imitate it. The most prominent deviations from the usual conformation of the skull are the great flattening of the frontal and occipital bones, and the consequent diminution of the antero-posterior diameter and the increase of the lateral diameter of the skull. The vertex is pushed backwards and the vertical diameter diminished. The basal aspect of the skull is very much altered; the face, retaining its usual width, seems very much disproportioned to the cranium, the lateral enlargement of which is here strikingly seen. These alterations exist of course in different degrees, in different specimens according to the degree and the duration of the compressing force employed, as will be evident from an examination of the table of measurements. Owing to the difficulty of applying the compressing force uniformly, I presume, very great distortion is sometimes produced. All of the skulls in my possession are strikingly non-symmetrical, but two of them, Nos. 6 and 7 of the catalogue, are particularly distorted, and in both the flattening has been produced principally upon the left side, leaving the capacity of the right side of the cranium very much the greater. In two of the eight skulls which I have, the frontal suture remains entirely perfect from the sagittal to the fronto-nasal suture. Can this be in any manner the result of the compression of the frontal bones? In seven of the eight, "ossa wormiana" are found, some of them very large.

According to Dr. Morton,* this custom of flattening the head obtains among many tribes, among which are the Klickatats, Kalapooyahs, and Multnomahs of the Wallamet river and its vicinity; and the Chinouks, Clatsaps, Klatstonis, Cowalitsks, Kathlamets, Killemoohs and Chelakis of the lower Columbia and its vicinity. It may not be interesting to state the mode in which this curious deformity is produced by these numerous tribes. It will enable us to appreciate their moral sensibilities to some extent.

"The mode by which the flattening is effected," says Mr. Townsend, "varies considerably with the different tribes. The Wallamet Indians place the infant, soon after birth, upon a board, to the edges of which are attached little loops of hempen cord or leather, and other similar cords are passed in front and back, in a zigzag manner, through these loops, enclosing the child and binding it firmly down. To the upper edge of this board, in which is a depression to receive the back part of the head, another smaller one is attached by hinges of leather, and made to lie obliquely upon

* Crania Americana p. 203.

the forehead; the force of the pressure being regulated by several strings attached to its edge which are passed through holes in the board upon which the infant is lying, and secured there."*

"The mode of the Chinouks, and others near the sea, differs widely from that of the upper Indians, and appears somewhat less barbarous and cruel, a sort of cradle is formed by excavating a pine log to the depth of eight or ten inches. The child is placed in it on a bed of little grass mats and bound down in the manner above described. A little box of tightly plaited or woven grass is then applied to the forehead and secured by a cord to the loops at the side. The infant is thus suffered to remain from four to eight months or until the sutures of the skull have in some measure united, and the bone become solid and firm. It is seldom or never taken from the cradle, except in case of severe illness, until the flattening process is completed."

It is not wonderful that the result of this process, to which these unfortunate babies are subjected is "often ulceration of the scalp and perhaps, not unfrequently, death itself." Three of the skulls in my possession present distinct evidences of ulceration of the frontal bones themselves, and one of them, the youngest, presents upon the frontal bone and the adjacent part of the parietals, that honeycomb appearance so familiar to the pathologist as the result of syphilitic disease.

Upon the Diagnosis and Treatment of Croup.—By Dr. Hirtz. —Before the labors of modern physicians had assigned to croup its true anatomical characteristics and nosological rank; when, yet confounded among the numerous family of laryngites, it formed a part of their history, it would have been very easy, and consequently quite uninteresting, to furnish cases of cure. Every physician then counted his fortunate cases by the dozen, and every family could cite cases of children attacked by croup and cured at least ten times.

Now, on the contrary, that the name of the true croup is only applicable to pseudo-membranous laryngitis, and that the progress of science has invested its diagnosis with such precision that it is impossible for an experienced physician to mistake it from the very commencement, croup has become a comparatively rare disease, and its cure an exception occurring at long intervals.

On the other hand, the scientific views of the progress and diagnosis of true croup are not yet sufficiently vulgarized among physicians as to render confusion impossible. It still to often happens, that it is mistaken in its insidious approach, and lulls the family

* Townsend, Journey to the Columbia River, p. 175.

and physician into a false security, and then shows itself with all its terrors in a few hours afterwards. In other cases, stridulaus laryngitis is taken for true croup, and draws down upon the unhappy child the whole superfluous arsenal of therapeutics, and excites the unnecessary fears of parents.

Dr. Hirtz, after these just reflections, reports two cases of pseudo-membranous croup in two sisters, which terminated in recovery. We shall reproduce only the last.

CASE.—Marie R. ——, aged 4 years, of good constitution but temporarily enfeeble by bilious diarrhœa, has been unwell for several days. Every morning she feels fatigued, complains of pain in deglutition; she is often hoarse but does not cough. The 25th, (the same day on which her younger sister was suffering from croup at its greatest intensity,) Marie appeared more unwell; she was dispirited and prostrated, more hoarse, and feverish. Dr. Hirtz was seized with a sinister presentiment. Notwithstanding the cries of the child, he examined the throat, and discovered that the soft palate, uvula, and pharynx were red and inflamed, and that the tonsils were already covered by a yellowish-white pseudo-membranous exsudation, which was quite thick, and occupied almost the whole of the surface of each tonsil. There were present, in fact, all the signs of croupal angina. Dr. Hirtz immediately prepared to perform cauterization, and effected this operation completely and satisfactorily in spite of the child's obstinate resistence.

The following night was tranquil; no unfavorable symptom supervened, and on the next morning, Dr. Hirtz hoped that the disease was aborted. This hope was realized; an abundant mucous secretion was observed in the fauces, deglutition became easy, and the pseudo-membranes, though they continued visible for two days, finally disappeared in copious discharges of mucous. The diptheritis was jugulated.

This case proves how false and dangerous are the ideas which still prevail in society, and even among some physicians, in regard to the incipient symptoms of croup. It is stridulous angina that awakens all the apprehensions of parents; it is false croup which calls forth all the solicitude of physicians; it is against this that every mother keeps that precious bottle of hive-syrup which never leaves her.

If there happens to be membranous croup, true croup, on the contrary, there is every chance that the physician is not called until the second or third day, that is to say, when grave symptoms announce that the disease has extended to the larynx.

In these two cases, it required, in the first, not only all the vigilance, but all the forsight of the maternal heart to awake suspicion, and in the second, the existence of croup in the family to cause that disease to be thought of while it was yet time. It will be noticed that the children were running about and playing when

the pseudo-membrane was already formed at the entrance of the pharynx.

We cannot therefore too often caution mothers against that dangerous error, which, by mistaking false croup for true croup, causes children to be tormented by violent and superfluous physic, and, which is worse, leads to deception in regard to one of the cruelest and most insidious of diseases.

It is desirable, I say, that it should be generally known, that when a child in full health is suddenly seized, during sleep, with cough and hoarseness, with oppressed breathing and rattling, there is no need to be frightened and to give powerful medicine; for this is not true croup. That if, on the contrary, after a febrile attack, a child has a cold in the head, sore-throat, difficulty of deglutition, and slight hoarseness, the fauces should be examined, or, better still, a physician summoned at once, for nineteen times in twenty true croup commences in this way.

I say nineteen times in twenty, for it is not to be forgotten that croup sometimes commences in the larynx and even in the bronchi, appearing afterwards in the pharynx. I reported a case of this sort twelve years ago; M. Nonat has seen another, and M. Barth a third. But it was on account of their rarity that these facts were published.

When croup attacks one child of a family, the remaining children should be watched with redoubled vigilance; for, whether it be contagious or endemic, the fact is certain that the disease often attacks many members of the same family.

A few words on the treatment of croup. The distinguished physicians who, at the commencement of this century, threw so much light on the nature of croup, attended too exclusively, perhaps, to the mechanical action of the false membrane as a cause of asphyxia. Hence the paramount indication of expelling this foreign body at all hazards, and consequently the use of emetic, which word has become almost the correlative of the word croup. In society especially, this mode of treatment has assumed an exclusive character, and persons believe themselves sufficiently protected if the arsenal of domestic medicines contains tartar emetic.

This doctrine applied in an absolute manner, is false in theory, and dangerous in practice; it is false in theory, because asphyxia may result from many causes besides obstruction of the glottis; it may be explained either by the extension of inflammation to the submucous and muscular tissues of the larynx, producing paralysis of the obturator muscles of the glottis, or by the propagation of diptheritis quite into the bronchi. This is why we often see children die after the expulsion of false membrane, and others recover without this being eliminated. This is why we often observe at the autopsy of children who have died in the last period of croupal asphyxia, that the laryngeal office is sufficiently open for the pur-

poses of respiration. And lastly, this is why tracheotomy is so often unavailing. This doctrine is dangerous in practice, because the reiterated and inopportune employment of emetics is not only useless, but often productive of dangerous disorders.

How can tartar emetic remove a membrane which is scarcely formed and adheres firmly to a surface upon which all moral secretions is checked by a specific inflammation? If it is persevered in, the efforts caused by it increase the cerebral and pulmonary congestion; the stomach is finally worn out and no longer responds to the remedy. The physician returns to the charge with sulphates of copper or zinc, and the child sometimes dies, as Dr. Boeckel has observed, from the intoxication produced by these poisons, rather than by croupal asphyxia. Tartarized antimony given judiciously, however, is a grand resource; but it must be employed with method, and, above all, opportunely, the favorable moment being calmly awaited. This moment occurs when the specific inflammation, modified or checked by other remedies, again permits some secretion of mucus, which separates and detaches the false membranes.

Dr. Hirtz believes that the most rational method of treatment consists in modifying in the first place, the specific inflammation by cauterization; and in combatting it by calomel combined with a few leaches. When this result is obtained, we should act on the mucous secretion by kermes mineral and the golden sulphuret of antimony, and lastly, upon the expectoration by two agents which then become invaluable; the first is tartar emetic, administered discrimination and at proper intervals, and the second is muriate of ammonia (formula of Richter), a true incisive, according to the old momenclature, and a powerful expectorant when administered perseveringly.—*Revue Médico-Chururgicale de M. Malgaigne*, from *Gaz. Méd. de Strasbourg.*

GENERAL PATHOLOGY AND TREATMENT OF DYSPEPSIA.—By PROF. J. H. BENNETT, M. D., of the University of Edinburgh. By Dyspepsia is generally understood all those functional derangements of the stomach which are primary in their origin, that is, not dependent upon, nor symptomatic of, inflammation or other disease in the economy. Such a disordered condition is exceedingly common, and often constitutes the despair of the physician, arising as it frequently does, from causes which are often obscure, or if discovered, are beyond his control. This will become apparent by considering, in the first place, those circumstances which require to be united to secure a healthy digestion. These are:—1st. A proper quantity and quality of the ingesta. 2d. Sufficient mastication and insalivation. 3d. Active contractility in the muscular coat of the stomach. 4th. Proper quantity and quality of the gas-

tric, biliary, and pancreatic fluids. 5th. A consecutive and harmonious action of the intestinal canal. Dyspepsia, or indigestion may be produced by any cause which occasions derangement of one or more of these conditions; and hence why so many different circumstances may produce somewhat similar symptoms, and why so many different remedies have been found effectual in various cases. Notwithstanding that you will frequently meet with instances which baffle all preconceived rules, there can be no doubt that a careful attention to the essential physiological conditions above enumerated, will in the great majority of cases, conduct you to a successful rational treatment. Thus,—

1st. Of all the causes of dyspepsia, excesses in eating and drinking are the most common. An over-distended stomach, or too rich a meal, not unfrequently induces a feeling of weight or fullness in the epigastrium, nausea and eructation of acid, bilious or gaseous matters, with a loaded tongue, headache, and other general symptoms. This is acute dyspepsia, or the *embarras gastrique* of the French. Occasionally, there is more or less vomiting of bilious matter, when the attack is vulgarly called a *bilious seizure*. If called in to such a case, immediately on its occurrence, and before the ingesta have left the stomach, as determined by the sense of load at the epigastrium, an emetic should be given; but if vomiting be present, it should be assisted by warm diluents. As soon as the stomach is quieted, or, if you have been called in at a late period, when the ingesta have passed into the intestines, a purgative pill should be administered, consisting of four grains of calomel, with four of compound extract of colocynth, followed in a few hours by a purgative draught of salts and senna. If necessary also an enema may be given. The purging, with a day or two's confinement to farinaceous food, will generally get rid of such an attack; but their frequent repetition leads to the chronic form of dyspepsia, when careful regulation of the diet with exercise, must constitute the chief treatment. Hence the advantage of what is called "change of air," and much of the benefit which is derived from watering-places. Chronic dyspepsia, however, is far more commonly caused by excess of spirituous and vinous drinks, than by eating, when abandonment of the evil habit is a *sine qua non* in the treatment. Tea drinkers are very liable to the disease, and its frequency among female servants is probably owing to this cause.

2d. It may frequently be noticed, that those who have acquired the habit of eating rapidly are more or less dyspeptic. I knew a journeyman printer who was much tormented with indigestion, but who was cured by changing his residence. The cause of this was for some time a mystery, but on again changing his house the disease returned, although no apparent cause could be discovered. I ascertained, however, that it depended not on the locality *per se*, but on its distance from the printing-house. When far off he ate

his dinner with his family rapidly, having only just time enough to walk home and back within the hour. When he lived near, the time otherwise spent in walking was occupied in eating, or in cheerful converse with his wife and family. Since I made this observation, it has often occurred to me that the distant residences of artisans from their place of employment may be the occasional cause of the dyspeptic symptoms they frequently possess. With regard to the exact object of the saliva in the process of digestion, whether it be to convert the farinaceous compounds of the food into glucose, or by its viscidity, to mix up air with the portions swallowed, is not positively determined; but its necessity for the digestion of man is shown by cases where the under lip has been lost by accident or disease, and where salivary fistula has formed, in which dyspepsia is generally present, and in which the disordered digestion has been cured by operations that, by restoring the parts to their normal condition, prevent the escape of saliva. Again, persons habituated to the dirty habit of spitting, are for the most part dyspeptic; and it has been asserted that the pale countenances of the inhabitants of the United States and the leanness of their persons are owing to this cause. In all cases where dyspepsia can be traced to this source, the treatment must be obvious.

3d. The contractile movements of the stomach, which, by kneading the ingesta, and keeping them in constant motion, secures an intimate admixture with the gastric juice and the rapid transference to the duodenum of such portions of it as are transformed into chyme, are evidently of immense importance to a proper performance of digestion. The experiments of physiologists have shown that digestion in gastric juice out of the stomach is much slower than in it, and that section of the pneumogastris nerves, by arresting the contractile movements, only permits the circumference of the mass in contact with the secreting surface to be digested.—These facts at once explain the well-known influence of mental emotions upon the stomach. Contentment and hope are as favorable, as dissatisfaction and despondency are opposed to good digestion. Nothing is more common than dyspepsia among literary men who overtask the mental faculties; among young persons of very excitable minds; and among individuals of a melancholy temperament, hypochondriacs, etc., etc. It is in such cases that cheerful society, active and appropriate occupations, change of scene, removal from mercantile or literary employments, different trains of thought, and so on, are beneficial. Hence also many of the good effects of travel, visiting watering-places, &c., &c.

4th. Our knowledge with regard to the offices performed by the gastric, biliary and pancreatic juices in digestion has of late years been much advanced. Thus the gastric juice more especially operates on the albuminous, and the pancreatic juice on the fatty compounds of the food. The function of the bile is perhaps more

obscure, although it probably acts as a means of precipitating or separating some of the excretory matters from chyme, and so facilitates assimilation of the nutritive portions. Digestion may be deranged by all those causes which too much increase or diminish the secretion of these three fluids. Thus excess of acidity in the stomach is one of the most common causes of dyspepsia, producing that form of it which accompanies scrofulous and tubercular diseases. It may be in such excess as to neutralize the alkaline action of the pancreatic juice, and render it difficult or impossible to emulsionize fatty matters. In such cases, alkalies, with bitter tonics, and the direct introduction of animal oils in excess, are indicated. On the other hand, the gastric juice may be diminished in quantity, as frequently occurs in persons who suddenly overtask the powers of the stomach at feasts, or in old persons with feeble digestion. The sense of load after eating is generally indicative of slow digestion from this cause. In acute cases, a stimulant rouses the stomach to increased action, and hence the moderate use of drams and generous wines after dinner is occasionally useful. In old persons the sense of load and feebleness is best removed by giving up tea, and drinking at night a little weak brandy and water. In chronic cases, acids are indicated, especially muriatic acid. The *Tr. Ferri co.* of the Pharmacopœia is a useful preparation in chlorotic females. We have no distinct means, as far as I am aware, of rousing the pancreas into into action, and yet many cases are on record in which fatty matters have passed undigested through the alimentary canal in consequence of obstruction to the pancreatic duct. In such cases, and all those in which fatty matters are difficult to digest, alkalies, especially the liquor potassæ with vegetable tonics, are indicated. When the bile is deficient, constipation and dyspepsia are usual results, and are to be relieved by gentle mercurial purgatives, with extract of taraxacum, and by remedies, such as rhubarb and especially the compound rhubarb pill, which, by acting on the duodenum, also favor the flow of bile into the upper part of the alimentary canal. Dr. Clay, of Manchester, has recommended in such cases the administration of ox-gall, a remedy, which, although not extensively given, is evidently rational, and calculated by its purgative action to be highly serviceable. Excess of bile, on the other hand, ought to be treated by drastic purgatives, diuretics and diaphoretics, according to circumstances, to cause excess of excretion. Exercise should also be insisted on to call the lungs into action, and thus relieve the liver in its office of separating hydro-carbon.

5. A derangement of the consecutive and harmonious action of the alimentary canal is another frequent cause of dyspepsia, for it is as necessary that those portions of the food which are not assimilable should be removed out of the economy, as that the nutri-

tive materials should be absorbed. Hence whatever impedes the contractility of the intestinal canal, whatever alters the structure of its mucous membrane, or whatever mechanically obstructs its calibre, may always be observed to induce dyspeptic symptoms. The removal of these various conditions, whether by stimulating the nervous centres, by appropriate diet, or by purgatives and astringents, as they may be required, need not be more particularly dwelt upon.

In many cases of dyspepsia, two or more of these causes may be combined, so as to render the indications for treatment complex and apparently contradictory. In other cases, one or more causes may exist, although from the indications presented they cannot be determined, when our treatment must always be more or less vague and unsatisfactory. Lastly there are a few instances where dyspepsia can only be explained by *idiosyncrasy*, in which we find this or that particular article of diet to derange the digestive functions, and in which avoidance of the offending cause is the only plan that is attended with success.—*Monthly Journal.*

FOREIGN BODY IN THE AIR PASSAGES—RETAINED FIFTEEN MONTHS. —By G. R. HENRY, M. D., Burlington, Iowa.—Sept. 22, 1852, Mr. J. L., of Yellow Springs in this county, brought to me his child three years old, who had about two weeks previously suffered a water-melon seed to pass into the larynx; I was unable to detect the presence of any foreign substance, and consequently declined performing the operation of tracheotomy, for which purpose the child had been brought to me. The child was suffering from inflammation of the left lung, and I felt satisfied from repeated examinations that if the seed was yet in the passages, that it was so impacted into one of the smaller bronchial tubes of the left lung that an operation would be unavailing. Giving this as my opinion, the father took the child home, to the charge of Dr. F. whose patient he was, and under whose care she rapidly recovered from the attack of pneumonia and regained her usual health, but would occasionally be troubled with severe attacks of coughing. I have not seen this little patient since she was first brought to me. But Mr. L. called a few days ago at my office, and said that on the 13th of December 1853, during a violent attack of coughing she had thrown up the water-melon seed which had been forced into the trachea fifteen months previously; the seed being scarcely altered from its original condition; since which time the child has been free from cough.

This case shows the remarkable power that nature possesses, of adapting herself to the exigencies of different situations, and

teaches us that persons beyond the reach of art may yet be cured by the *vis medicotrix naturæ*.

Had the child been brought to me immediately after the accident occurred, I would have operated with much hope of success, for then the foreign body was loose, and as her father expressed it, "would flip" when she breathed, but when I saw her there was no *positive* evidence that the seed had been coughed up, and there was certainly great danger of increasing the inflammation which had already supervened.—*Iowa Med. Journal.*

Tumor of the Breast—Diagnostic value of the Discharge from the Nipple.—Dr. Richard reports, in the Revue Medico-Chirurgicale, six cases of Tumors of the Breast, in which he observed a discharge from the nipple. This discharge varied very much in character, from the appearance of pure blood to that of clear water. It was very abundant in certain cases, flowing out spontaneously; whilst in others there was only an oozing, or a drop or two would escape, on pressure being made. In spite of this diversity of aspect, the liquid could be considered as an habitual lactiform secretion, mixed or not, with blood. Another important result was, that all the tumors had the same nature, which was partial hypertrophy of the mammary gland, but the form and degree of the malady varied. In cases of long standing, where there was softening of the gland, the blood was found in a kind of cyst, in those more recent, the lacteous secretion predominated. This discharge appears to be peculiar to simple hypertrophy of the mammary gland; for, in twenty-seven cases of cancer of the breast, confirmed by examination with the microscope, not one showed a discharge from the nipple. The author concludes, from his observations, that the discharge from the nipple is a frequent symptom of partial hypertrophy of the mammary gland, and that its existence is a favorable prognostic in tumors of the breast.—*Charleston Journal.*

New York Medical and Surgical Society.—Extracts from the Minutes.—By Charles M. Allin, M. D., Secretary.—Dr. Van Buren related a case of congenital syphilis, presenting unusual tertiary symptoms. The patient was a child, fourteen months old, not yet weaned, and well nourished. There was a large periosteal tumor in the right temporal region, and another upon the left ulna; painless, indolent swelling of both testicles; great muscular weakness, and entire inability to support the weight of the body on the lower extremities. These symptoms had commenced three

months before. The child had been born perfectly well; and when about three weeks old, broke out with papular eruption, with successive pustules, and with ulcers at the angles of the eyes, mouth, and nose, preceded by snuffling and inability to nurse.

These symptoms were treated by another physician, with grey powders; and when three months old the child was apparently well. He continued well until the tenth month, when the present symptoms appeared, as already stated. The parents of the child have been married fifteen years. The father is a drinking man; confesses to have had primary symptoms before marriage, and has suffered much, and frequently from rheumatism and eruptions of the skin since, and has the latter at present. The mother is not aware that she ever had primary symptoms, and has had no recognized secondaries, except nocturnal rheumatic pains, from which she still suffers.

They have had four children before the present one, and all of them had well-marked eruptions and muscular weakness. They all died, at ages varying from three to fifteen months. This patient has been and is taking iodide of potassium, and the symptoms are all improving.—*N. Y. Med. Times.*

CHLORATE OF POTASH IN CROUP.—The following facts, as given by Dr. Sankey, corroborate the views laid down by Dr. Budd in his paper on Croup: a child aged thirteen months, with croup and bronchitis, was treated with blisters, salines, ipecac, &c., without benefit, when he was put upon the use of *chlorate of potash;* and although the child was much reduced, the circulation languid, the blood not properly oxygenized, yet in a short time the croup and bronchitis disappeared, and the child was restored to its usual good health.

Another child, æt. three years, with croup, had been treated with leeches, calomel and ipecac, without much benefit; he was put upon the *chlorate of potash*, and soon his breathing became easy, and his countenance lost its anxious and livid hue. It recovered as in the first case. The cholorate of potash is supposed to be in part decomposed, in these cases, and thus a large portion of its oxygen is given to the blood, for the absence of which the child perishes in attacks of croup.—*N. O. Med. Journal.*